

# ANNUAL REPORT *1990-91*



Ministry of Health & Family Welfare  
Government of India



02024





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CENTRAL HEALTH CELL



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Chand Chaudhary, Sr. Artist, MEM Dn.



## INTRODUCTION

**R**aising the standards of living and improving the quality of life of the common man has all along been one of the main objectives of our development planning. Health and Family Welfare activities continue to be an intrinsic part of the overall development process as healthy citizens alone can contribute to a nation's advancement.

2. With this end in view the Ministry of Health and Family Welfare has been consistently and assiduously following the twin goals of health for all and population stabilisation for reaching a Net Reproduction Rate of Unity by 2000 A.D. The advent of the last decade of the present century has ushered in the count-down for achieving these objectives laid down under the National Health Policy.

3. Health measures initiated in the past have contributed significantly to an increase in the average life span of our countrymen. Life expectancy at birth has now touched 59 years which is a big leap forward from 32 at the time of Independence. There continues to be a consistent decline in the death rate and a marginal decline in birth rate over the years. The preliminary Census-91 count has also shown a marginal declining trend in our population growth rate.

4. With a view to carrying health and family welfare services to every nook and corner of the country, the establishment of essential infrastructure continues to receive priority. As against the goal of establishing 54,612 Sub-centres during the Seventh Plan, 51,237 were actually established during the period. By the end of September 1990 as many as



1,30,512 Sub-centres were functioning in the country. Similarly, as against a target of 12,392 Primary Health Centres (PHCs) stipulated for the 7th Plan, 9,826 were actually established in that period and a total of 20,532 PHCs were functioning by the end of September 1990. A Sub-centre is established for every 5,000 population in general and for every 3,000 population in hilly, tribal and backward areas. A Primary Health Centre is established for every 30,000 population in the plains and for every 20,000 population in hilly, tribal and backward areas.

5. With a view to providing specialists' facilities to the rural population, efforts are afoot to establish an upgraded PHC with 30 beds and X-ray and laboratory facilities to cater to population of one lakh or 4 PHCs each. By the end of September 1990, about 1,853 Community Health Centres with these facilities were functioning in the country.

6. Efforts are continuing to control Malaria and to eventually completely eradicate this disease. From 6.47 million cases in 1976 Malaria positive incidence has come down to 2.02 million cases in 1989 i.e. a reduction of 68.78% in the 12 year period. However, in 1989 there was an increase of about 8.78% in malaria positive cases as compared to the corresponding period of 1988.

7. Vigorous steps have been taken to curb the growing menace of Kala Azar. An indigenous vaccine developed for treatment of Japanese Encephalitis, is under a supervised trial for feasibility test in four States.

8. Tuberculosis which was a great killer once has been rendered less frightful today, though it continues to be one of our major public health problems. Nearly 1.5% of our total population is estimated to be suffering from radiologically active T.B. of the lungs. Essential activities under the National T.B. Control Programme have been greatly extended at all levels. Short Course Chemotherapy drug regimens introduced in 212 districts of the country have shown encouraging results in reducing the T.B. treatment duration from 18-24 months to 6-8 months. More districts are to be covered under the new drugs in a phased manner in the years ahead. New T.B. case detection is being stepped up year by year. As against 10.81 lakh new cases detected in 1982-83, nearly 16.69 lakh cases were detected during 1989-90. Primary Health Centres are also being closely involved in T.B. case detection. A target of conducting 50 sputum examinations per month has been fixed for every PHC for TB detection among rural populations. Significant improvement in this activity has been reported.

9. A recent National Survey and Evaluation Study on the magnitude and causes of blindness conducted during 1986-89 under the aegis of this Ministry and WHO has shown that about 12 million persons are blind in this country. Cataract constitutes a major cause of blindness in India (81%). A Plan of Action was launched in 1976 to reduce blindness in the country from 1.4% to 0.3% by 2000 A.D. Cataract operations are given top priority under the programme with an average national target of 12 lakh cataract operations per year. 4,200 PHCs were strengthened for the purpose up to the 7th Plan and 250 are envisaged to be strengthened this year. Establishment of eye banks is being specially promoted.



10. Goitre which is an iodine deficiency disease continues to be prevalent in many areas. Earlier, it was believed to be confined to Sub-Himalayan regions of the country. However, Surveys have shown that it is prevalent in practically all States and UTs. In all, 204 districts were surveyed in various States and 182 districts were found to be endemic in iodine deficiency disorders. The programme of Universal Iodisation of Salt in a phased manner started in 1986 is expected to meet its objective by 1992.

11. Efforts are being sustained to spread health education and create a better awareness on AIDS. 45 surveillance centres and 4 referral centres have been set up in different parts of the country under the National AIDS Control Programme. The Indian Council of Medical Research have established 28 exclusive zonal blood testing centres in four metropolitan cities. Facilities have been developed in 10 Medical Colleges for efficient clinical management of HIV infected persons and AIDS cases.

12. To ensure availability and accessibility of minimum mental health care for all in the foreseeable future, the National Mental Health Programme was launched in the VII Plan. Application of mental health knowledge is being encouraged in general health care and social development.

13. The National Diabetes Control Programme was included in 7th Five Year Plan in the Central Health Sector. It is making headway towards early identification of high risk subjects and appropriate health education with focus on primary prevention of diabetes. Attention is being paid to help diabetes patients achieve both scholastic and physical attainments and ensuring improved quality of life. Poor strata of society are getting special attention.

14. Leprosy continues to be a major health and social problem in our country. India accounts for one-third of the total leprosy patients in the world. It is estimated that 4 million leprosy patients in the country are infectious cases and one-fifth are children while 15 to 20% of the total leprosy cases have deformities. No district is free from leprosy. It is proposed to arrest the disease in all the known leprosy patients by 2000 A.D. Multi-drug Treatment (M.D.T.) is showing encouraging results and trials testify that the annual detection rate has also come down considerably. All districts in the country are expected to be covered under M.D.T. in a phased manner by 1992.

15. The promotion of Indian Systems of Medicine and Homoeopathy continues to get high priority. There has been a gradual increase in Plan allocation for these systems from a mere Rs. 40 lakh in the 1st Plan to Rs. 129.05 crore in the 7th Plan. Special attention is being paid towards improving the quality of education and promotion of research in these systems.

16. The seriousness of the demographic profile in the country can hardly be over-emphasised. The Family Welfare Programme goes hand in hand with our health programmes so that population stabilisation becomes a realistic goal in the foreseeable future. The Ministry notices a bright spot in the preliminary Census Count-1991 released recently, which



shows a marginal decline in the population growth rates that reached a plateau during 1971-81. Out of 15 major States in the country, the average annual exponential growth rate registered a decline in 11 States during 1981-91 as compared to 1971-81. These States constitute 61% of the country's population. Our population which was 342 million at the time of independence has reached 844 million on 1st March, 1991.

17. The desire for a large family can be attributed to some extent to the high Infant Mortality Rate (IMR) and the low literacy level, especially among females. The IMR level of 91 per 1000 live births in 1989 can be termed as a substantial achievement against an IMR of 140 in 1975. Our target is to bring it down to 60 per 1000 live births by 2000 A.D. The Universal Immunisation Programme started in 1985 constitutes a major safeguard against six vaccine-preventable diseases among infants, viz. Tetanus, Diphtheria, Polio, Pertussis, Tuberculosis and Measles. It is also aimed to protect pregnant mothers and new-born babies from neo-natal tetanus.

18. In early 1986, this programme was named as one of the technology missions aiming at reducing mortality and morbidity among children and achieving self sufficiency in vaccine production. Starting with 31 districts in 1985-86, the programme covered 452 districts in 1989-90. Indigenous vaccine production continues in DPT group, BCG and Measles while Polio vaccine is still imported in bulk concentrate. During the year under report, the target for Universal Immunisation Programme was increased to cover all the infants. Disease surveillance to monitor the impact of these services shows encouraging trends, especially in terms of polio and diphtheria incidence of which is indicating a significant decline.

19. Promotion of Oral Rehydration Therapy to save children from death caused by dehydration through diarrhoea, constitutes another important component of child survival programmes. It is estimated that about 1.5 million deaths every year are related to diarrhoea. It accounts for nearly 25% of mortality especially among children below five years of age. It is estimated that about 90% of the children suffering from diarrhoea can be managed successfully at home by administration of home made/home available fluids at the very onset of diarrhoea. The thrust of the programme, therefore, is on education that enables mothers to apply all available home remedies towards oral rehydration in any situation of need. Health functionaries are being imparted essential training for case management and elimination of unnecessary drugs. Production of educational materials for the purpose has also been taken up in a big way.

20. Women and children together constitute the most vulnerable group in our society. To safeguard their health, prophylaxis against nutritional anaemia for both mothers and children is being provided free of charge under the primary health care programme. Children between 1 and 5 years are given Vitamin-A doses twice a year to prevent blindness caused by Vitamin-A deficiency.

21. Efforts are afoot to ensure aseptic deliveries and minimise complications during pregnancy which result in high maternal mortality, particularly in rural areas. The correlation between unplanned, early reported birth and maternal health is also being explained to mothers. Training of



traditional birth attendants is being intensified. There are at present more than 6 lakh trained birth attendants operating in the country.

22. Information, Education and Communication approach to bring about a value-change in society has been given a new thrust to make the two child norm part of our cultural ethos. Area specific approaches to conform to the communication requirements of special areas and interpersonal communication to help overcome inhibitions, remove misconceptions and generate demand for services received special attention. The I.E.C. Project launched in 1987-88 in four low performing States in the Hindi belt has shown encouraging results in making the infrastructure more responsive to the needs of the people.

23. The programme continues to attach due importance to the role played by voluntary organisations and organised sectors of trade and industry. Regional meetings were organised during the year under report with the participation of registered and interested voluntary non-governmental organisations to discuss the extent and mode of their involvement in the National Family Welfare Programme.

24. The incidence of female foeticide that has come in the wake of amniocentesis and similar tests has exposed the inherent unseemly social prejudices against women. The menace is sought to be countered through community education and legislation to effectively curb it and restrict the availability of these tests only for medical and research purposes.

25. The upward swing continues in performance under the Family Welfare Programme. However, as against the Couple Protection Rate of 60% envisaged by the turn of the century, we have touched a level of 43.3% up to March, 1990. The performance under the programme is responsible for averting 118 million births in the country so far. During the Seventh Plan, the total number of acceptors has been persistently rising year by year from 18.92 million in 1985-86 to 26.04 million in 1989-90 which is an all time record so far in any year since the inception of the programme. This number during 1988-89 was 24.37 million.

26. During 1990-91 (April, 90 to March, 91), the total number of acceptors of different family planning methods was 25.15 million (Provisional).

27. The birth rate is estimated to have come down from 41.2 per thousand in the mid-sixties to 37.2 during 1971-81 and SRS estimates indicate a birth rate of 32.6 for 1986 and 30.5 for 1989. This is a decline of 10.7 points or 26.0% during the 24 year period. We have, however, to reach the level of 21 per thousand birth rate by the turn of the century for which all out efforts are being made.

28. It is being increasingly realised that closely linked as the family welfare programme is with all socio-economic factors, it cannot be viewed in isolation and confined to the responsibility of one Department or one Ministry alone. It has to be a participative and collective effort on the part of all Departments of the Government.



29. The Ministry rose to the occasion to provide the much needed relief during emergencies and natural calamities and took speedier measures to prevent epidemics after floods or earth-quakes. Such assistance transcended the confines of national borders and aided numerous countries in their hour of need.

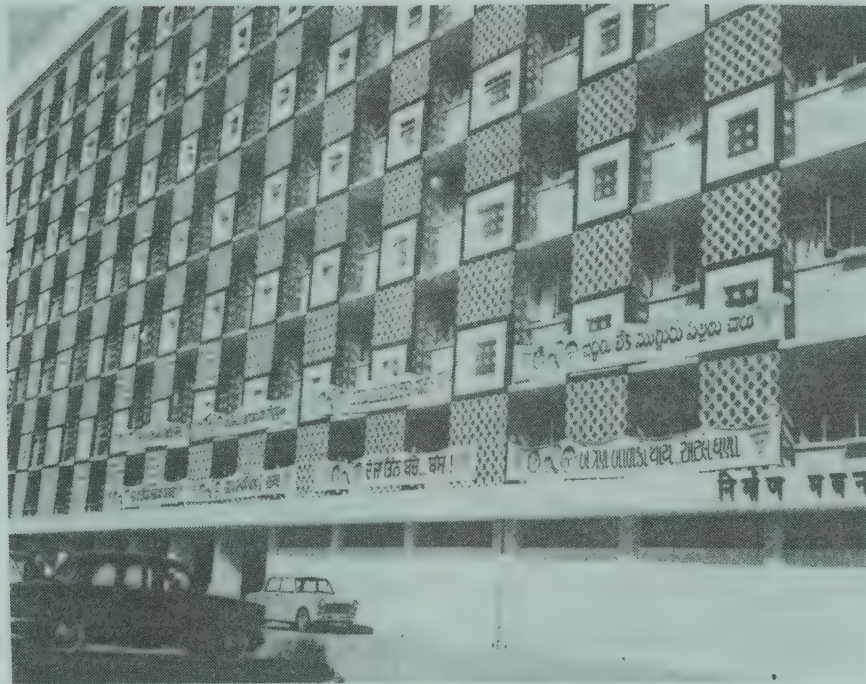
30. Shri Nilamani Routray demitted office on April 23, 1990. He was succeeded by Shri Rasheed Masood who demitted charge of office on November 7, 1990. The Ministry functioned under the charge of Prof. Shakeel-ur-Rehman and Shri Dasai Chaudhary who assumed office on November 21, 1990 as Union Minister of Health and Family Welfare and Union Deputy Minister in the Ministry respectively. Prof. Rehman relinquished charge on February 20, 1991. In view of its national importance, the Department of Family Welfare continued to be under the charge of a full time Secretary.

New Delhi  
Dated: May 9, 1991

R.L. MISRA  
Secretary (Health)  
*In the Ministry of Health & Family Welfare*  
*Government of India*



# ORGANISATION



**H**ealth and human development form integral components of overall socio-economic development of a nation. The Ministry of Health and Family Welfare plays a vital role in the national efforts to enable the citizens to lead a healthy and happy life. Under the Indian Constitution, the items public health, sanitation, hospitals and dispensaries fall in the State List. Items like population control and family planning, medical education, adulteration of foodstuffs and other goods, drugs and poisons, medical professions, vital statistics including registration of births and deaths and lunacy and mental deficiency find a place in the Concurrent List.

1.1.2 The Ministry of Health & Family Welfare at the Centre is responsible for implementation of numerous programmes of national importance like family welfare, primary health care, prevention and

control of major diseases, etc. which form the main plank of our development efforts. The Ministry has several Centrally-sponsored schemes which are implemented through the States. At the same time, it has also Central Sector Schemes. All these schemes aim at fulfilling our national commitment to attain the goal of Health for All by 2000 AD in accordance with Alma-Ata Declaration of September 1978 to which India is also a signatory.

1.1.3 Realising the need for establishing comprehensive and integrated primary health care services and family welfare services to reach the people's doorsteps even in the remote and far-flung rural areas, an integrated health care delivery system with the maximum community participation has been developed and is being implemented. The administration



and implementation of all these programmes is organised through an integrated structure of health and family welfare services in the country.

1.1.4 The Ministry of Health and Family Welfare at the Centre consists of the Department of Health and the Department of Family Welfare each of which is headed by a Secretary to the Government of India. (The Organisational Charts of Department of Health and Department of Family Welfare appear at Annexure I and Annexure II, respectively).

1.1.5 There are 3 Subordinate Offices located at various places of the country and they function directly under the Ministry (list at Annexure-IV). The Ministry is also administratively concerned with 29 Autonomous/Statutory bodies. There are also 3 public sector undertakings within the administrative control of the Ministry.

## **1.2 Department of Health**

1.2.1. The Department of Health deals with medical and public health matters including drugs control and prevention of food adulteration. It is headed by a Secretary to the Government of India who is supported by an Additional Secretary. The Department functions through the Directorate General of Health Services - an Attached Office (Organisational Chart at Annexure III). It has 87 Subordinate Offices (list at Annexure-V). The Directorate General of Health Services renders technical advice on all medical and public health matters and in the implementation and monitoring of various health schemes.

## **1.3. Department of Family Welfare**

1.3.1. The Department of Family Welfare is headed by a full-time Secretary to the Government of India, who oversees the implementation of the programmes concerning family welfare and maternal and child health in the States and Union

Territories and coordinates the activities and functions of the Technical Divisions and Secretariat side.

1.3.2. On the Technical side, the following Divisions are functioning in the Department of Family Welfare:

1. Programme Appraisal and Special Schemes,
2. Technical Operations
3. Maternal and Child Health
4. Evaluation and Intelligence
5. Mass Education and Media
6. Nirodh Marketing Supply/Distribution
7. Transport
8. Universal Immunization Programme
9. Area Project.

1.3.3. The Technical Divisions look after all components of the technical programmes viz. Sterilisation/IUD/Nirodh, Post-Partum, Maternal and Child Health, Universal Immunization Programme, etc. Evaluation and Intelligence Division helps in perspective planning, monitoring and evaluating the programme performance. It also coordinates demographic research.

1.3.4. The Media Division is responsible for providing educational publicity and extension support to the programme through mass education and extension education. It is also looking after the population education activities.

1.3.5. On the Secretariat side there is Policy Division, Aided Programmes Division, Organised Sector, Cooperative Sector, Voluntary Organisations and Plan Budget Division.

## **1.4 Toning Up of Administration**

1.4.1. An efficient administration is the backbone of any organisation. The officers and staff of Ministry of Health and Family Welfare are fully conscious of this fact. In order to ensure that government



policies and programmes are implemented not only in time but efficiently also, latest and efficient methods of management have been adopted. Keeping this in view computerization of data has been taken up in a big way. Administration has been toned up by enforcing discipline and accountability. To ensure punctuality, surprise checks have been conducted. Calendar of activities and action plan were drawn up to achieve the targets in time. Special drives were undertaken to weed out old records. A close watch was kept to minimise the delays on disposal of cases.

## 1.5 Redressal of Public Grievances

1.5.1 A Deputy Secretary has been appointed as Director (Grievances) in the Ministry to look into the various grievances of public including pensioners and for their redressal. Besides, a Public Grievances Cell under the direct supervision of the Director has also been set up in the Ministry in January, 1989 to specifically deal with such grievances which are received in the Ministry and also to monitor the functioning of the grievances redressal machinery in the various offices/organisations under this Ministry.

1.5.2 Apart from the above, a '*Shikayat Adalat*' has been formed in this Ministry w.e.f. 11.9.1989 to settle the grievances of the aggrieved CGHS beneficiaries and the public at large receiving treatment from the hospitals within a reasonable time. The composition of the Adalat is as indicated below:

- |  |            |
|--|------------|
| i) Dy. Director General<br>(M) D.G.H.S., New<br>Delhi  | Chairman   |
| ii) Dy. Secretary (Internal Finance) M/o<br>Health & F.W.                                      | ... Member |
| iii) Director, C.G.H.S.  | ... Member |
| iv) Med. Supdt. of the related Hospital (to be<br>associated at the time<br>of <i>Adalat</i> ) | ... Member |

v) Director (EMR) D.G.H.S., New Delhi	... Member-Secretary.
--	-----------------------

1.5.3 The *Adalat* will be held once in three years. Its scope for the present has been limited to deal with the cases relating to CGHS/Hospitals in Delhi only.

1.5.4. In addition to these, measures are taken in the Ministry to deal with grievances of public concerning this Ministry. A Public Grievances Officer is also functioning in the Hospitals/Organisations under the control of this Ministry to deal with and redress the grievances expeditiously to the satisfaction of the aggrieved party.

1.5.5 During 1990, 29 grievances were received. Of these, 17 have already been settled. Remaining 12 are under consideration.

## 1.6 Central Health Service

1.6.1 Central Health Service caters to the need of various participating units in providing medical manpower. The service was restructured in 1982 and now consists of following four streams:—

- (a) Public Health;
- (b) Teaching;
- (c) Non-teaching; and
- (d) General Duty

1.6.2 During the period under report, 11 officers on Non-Teaching side were promoted to Supertime Grade (Rs. 5900-6700) including the grade of Additional D.G. (Rs. 7300-7600). 8 officers were promoted to Specialist Grade-I in the pay scale of Rs. 4500-5700; 33 officers got promotion to the Specialist Grade-II in Non-Functional Selection Grade in the scale of Rs. 4500-5700 and 74 officers were placed in the Senior Scale (Rs. 3700-5000) from Specialist Grade-II Scale (Rs. 3000-5000) in Non-Teaching Sub-cadre.

1.6.3 On Teaching side, .23 Specialist



Grade-I Officers were promoted as Director-Professors retrospectively with effect from 1.4.89. 4 Specialist Grade-I Officers of Public Health Sub-cadre were promoted to the Supertime Grade in the pay scale of Rs. 5900-6700. 59 Assistant Professors in the scale of Rs. 3000-5000 have got promotion as Associate Professors in the scale of Rs. 3700-5000. 14 Specialist Grade-II Officers on the teaching and Public Health side were promoted to Specialist Grade-I in the pay scale of Rs. 4500-5700. 11 Specialist Grade-II Officers on Public Health side were placed in the senior scale of Rs. 3700-5000. 53 Specialist Grade-II Officers on the teaching side were placed in Non-Functional Selection Grade of Rs. 4500-5700.

1.6.4 In the General Duty Sub-cadre, the following promotions have been effected during the period from April, 1990 to December, 1990:—

i) Medical Officers (Rs. 2200-4000) to Senior Medical Officers (Rs. 3000-4500)	130
ii) Senior Medical Officers to Chief Medical Officers (Rs. 3700-5000)	39
iii) Chief Medical Officers to Chief Medical Officers (NFSG) (Rs. 4500-5700)	5

1.6.5 Regular recruitment to the posts of Medical Officers, Specialist Grade-II Officers and Specialist Grade-I Officers is being made through Union Public Service Commission depending upon the number of vacancies in these grades. In order to improve the quality of work of Medical Officers and for their career growth, they are encouraged to undergo higher studies by granting them study leave/EOL. Arrangements for providing them training in different aspects of health service administration are also made from time to time.

### 1.7. Computerisation

1.7.1 The Health Information Systems Division (HISD) of National Informatic Centre (NIC), Planning Commission provides the informatics services to the Ministry of Health and Family Welfare. In the last few years, a large number of computerised information systems, related to Health and Family Welfare activities, have been developed. NIC runs a full-fledged computer centre, totally dedicated for the Ministry, in Nirman Bhavan. The present facilities include 386 based Super ATs, PCs, PC/XTs, PC/ATs and a range of advance computer peripherals with graphics and laser printing facilities. A large number of dumb terminals connected to Super ATs provide on-line database facilities to senior officers of the Ministry. A team of about twenty five computer professionals from NIC work for the Ministry to develop new systems and to maintain the various on-going projects. A brief outline of some of the major projects completed/on-going during 1990-91 is given below:

i) *Health Management Information System*:— To monitor the National Health Programme and its contributions to achieve *Health for All* by 2000 A.D., the HISD of NIC and Central Bureau of Health Intelligence (CBHI) of Directorate General of Health Services (DGHS) in close collaboration with the various divisions of the Ministry of Health & Family Welfare, State Health Departments and apex health institutions have developed a computer based Health Management Information System (HMIS version 2.0). The System is expected to provide management support at every tier of the health care delivery system viz: Centre, State District, PHC, Sub-centre etc. The input from the PHC and the District will be fed into the district computer centre of NIC (DISNIC) and the transmission of the information to the State level and the Central level will



be on NICNET (a satellite based computer-communication network of NIC) in the form of outputs. The feedback information to the various levels will also be through NICNET. The new system is basically a successor to the Health Management Information System developed by the CBHI during 1986-88 and field tested in four participating States during 1989. But its scope and content has been fairly enhanced to include District, Sub District and private hospitals and it will be using the most sophisticated computer communication facilities of NICNET for information transfer.

i(a) The system will be implemented in States in a phased manner. Initially, nine States viz: Maharashtra, Meghalaya, Kerala, Gujarat, Rajasthan, Haryana, West Bengal, Tamil Nadu, Pondicherry (U.T.) have been selected for its implementation and the rest of the States/UTs will follow.

ii) *Monitoring of the Universal Immunisation Programme—At District Level:*— After the successful implementation of the MIS for Universal Immunisation Programme (UIP) at the Central level, NIC has developed a comprehensive software package to monitor the UIP programme at the district level. The package will facilitate the district immunisation officer to monitor the programme more effectively. The aggregated information will be put in the district computer centre of NIC (DISNIC) at every district and through NICNET on-line micro level information will be available at various levels viz: district, state and centre. A pilot test of the package has been successfully conducted in Tamil Nadu and it is proposed to implement the same in other States in a phased manner.

iii) *Concurrent Evaluation of Family Welfare Programme:*— Department of Health and Family Welfare conducted

a detailed sample survey regarding the impact of the family welfare services being provided by the health set-up in the country. The survey was conducted on monthly basis from August 89 to August 90 and included Primary Health Centres, Sub-Centres and actual beneficiaries. NIC has designed and developed a comprehensive database for validation and analysis of the data. The data-base provides various statistical tables analysing the important indicators for assessing the adoption and impact of the Family Welfare Programme. Some of the analysis reports have been presented graphically to highlight the important findings of the survey.

iv) *Health Information of India:*— The CBHI collects annually the data pertaining to health situations in India. It covers pattern of investment and expenditure on health programmes, medical and para-medical education, health manpower, medical care facilities, community health services, morbidity and mortality statistics, comparative international health statistics and also data on important socio-economic indicators and other vital events. This data is annually published by the CBHI. NIC has developed an on-line query-based database covering this data. The package is very useful to health administrators and the retrieval does not require any prior knowledge of computer. It also provides on-line information updation facilities. The database is available on the computer network in the Ministry.

v) *All India Hospital Directory:*— In the year 1988, NIC created a database on Directory of Hospitals in India and it was eventually published by the CBHI. This database has been made public through the General Information Services Terminals (GIST) of NIC and now the access to the information is possible from all the NICNET



nodes in the country. For updating the information of this directory, a detailed system analysis was done and a computerised input proforma has been designed with help of CBHI. As per the revised proforma, the information will be collected again and updated. It will be made available to the user through on-line menu-driven database on NICNET.

1.7.2 In addition to the above, there are various other software applications programmes, which are implemented/on-going in the following areas:

- i) Health Education in India;
- ii) Monthly & Weekly Bulletin on Morbidity and Mortality of Notifiable Diseases;
- iii) Payroll for the Ministry;
- iv) File Monitoring;
- v) VIP Reference Monitoring;
- vi) Appointment Schedule;
- vii) Allotment of Central Quota-MBBS/PG Medical Seats;
- viii) Award of Fellowships for Training Abroad under International Aid;
- ix) Customs Duty Exemption on Import of Medical Equipment;
- x) Cadre Management System for Central Health Service Officers;
- xi) Vehicle Monitoring System for Family Welfare;
- xii) Bibliographic Information System for National Medical Library.

1.7.3 In keeping with the ever increasing need for medical information in the country, the National Informatics Centre and Indian Council of Medical Research (ICMR) entered into an agreement with

the National Library of Medicine (NLM), USA, in 1987. The agreement was aimed at obtaining an easy access to the facilities of the Medical Literature Analysis and retrieval Systems (MEDLARS) of the NLM.

1.7.4 NIC acts as a nodal agency for MEDLARS services in India. This is one of the world's largest computerised biomedical bibliographic systems comprising 30 databases. Some of the databases are MEDLINE, CANCERLINE, TOXLINE, CHEMLINE, HEALTH, AIDS-LINE, BIOETHICSLINE, TOXNET and POPLINE. The Bibliographic Information Division of NIC has access to all these databases through NICNET.

1.7.5 The services of the Division are primarily aimed at providing information to clinicians, medical teachers, students and researchers from medical/research institutions. Approximately 200 search requests are received every week. To provide a document support to these information services holding of over 200 Indian medical libraries have been computerised and will soon be available through NICNET. This would enable doctors in the country to locate any required documents.

1.7.6 This Division has also created national database of Indian publications in the field of Neurology, Cancer, Tuberculosis, Leprosy and Nutrition. These databases cover information which is not included in International databases but is of relevance to the Indian medical community.



PART - I

# DEPARTMENT OF HEALTH









## HEALTH PLANS



**H**ealth Plans constitute a vital element in the overall strategy of socio-economic development of a country. A nation can steadily march on the road to progress only by ensuring a reasonable health status of its people.

2.1.2 The Health Plans contain financial allocations and objectives for various components of health services facilitating provision of these services in the length and breadth of our country. Due importance, is therefore, given to this basic area in the process of our development planning. The 7th Plan envisaged a complete integration of the organisational set up under Health, Family Welfare and MCH programmes and sought to take up the financial integration towards the objective of funding of services as a package programme. The 7th Plan outlay for Health Sector was Rs. 3392.89 crore out

of which Rs. 2495.55 crore was for State and Union Territories, Rs. 557.75 crore for Centrally, Sponsored Programmes and Rs. 339.59 crore for Central Schemes.

2.1.3 During the year 1990-91, Rs. 14,990.00 lakh for Centrally Sponsored and purely Central Schemes and Rs. 11,463.00 lakh for States and Union Territories for the Plan Programmes and Rs. 41,726.00 lakh for the Non-Plan Programmes have been allocated. As such, a total outlay of Rs. 68,179.00 lakh has been provided.

### 2.2 Audit Inspection Report

2.2.1 As per information received up to the end of October, 1990, from various Accountants General and Director of Audit, Central Revenues, the number of audit objections and the number of para-



graphs from the Audit Inspection Reports on the Accounts of Department of Health and its Attached and Subordinate Offices, outstanding as on 31.10.1990 were as under:—

Inspection Reports	— 300
Audit Paras	— 986

2.2.2 All efforts continue to be made to settle the out-standing audit objections and audit inspection report paragraphs.

### 2.3 Financial Assistance to Voluntary Organisations

2.3.1 The Government of India has been encouraging community participation and people’s involvement in the Health and Family Welfare Programme. It has been providing financial assistance, guidance and encouragement to Voluntary Organisations for participation in various national programmes.

2.3.2 The Government of India has constituted a Grants Committee under the Chairmanship of the Union Minister for Health and Family Welfare for considering and recommending financial assis-

tance to Registered Voluntary Organisations under the following schemes:—

- i) Scheme for Improvement of Medical Services.
- ii) Promotion and Development of Voluntary Blood Donation Programme.
- iii) Special Health Scheme for Rural Areas for setting up 30-bedded hospitals/dispensaries in rural areas only.

2.3.3 During the financial year 1989-90, grants amounting to Rs. 34.14 lakh were given to 26 institutions under the Scheme at S.No. i) and ii) above. Under the scheme at S.No. iii) above, grants of Rs. 8.76 lakh were given to 4 institutions.

### 2.4 Health Minister’s Discretionary Grant

2.4.1 A sum of Rs. 14.75 lakh (approx.) was utilised for sanctioning grants amounting to a maximum of Rs. 10,000/- in each individual case as financial assistance out of the Health Minister’s Discretionary Grant during 1989-90 for medical treatment of very poor and needy persons in respect of diseases for which free medical facilities may not be available in general hospitals. A total of 374 individuals were provided financial assistance during this period.

DETAILS OF PROVISIONS UNDER REVENUE AND CAPITAL (PLAN AND NON-PLAN) FOR 1990-91 IN RESPECT OF DEPARTMENT OF HEALTH

DEMAND NO.	(Rupees in lakhs)				
	PLAN CAPITAL	REVENUE	NON-PLAN CAPITAL	REVENUE	TOTAL
1	2	3	4	5	6
40—Department of Health.	45,00	264,08,00	166,67,00	250,59,00	681,79,00
30—Loans and Advances to Govt. Servants.	—	—	—	93,10	93,10
75 & 76 Works Budget.	10,47,00	—	—	—	10,47,00
	10,92,00	264,08,00	166,67,00	251,52,10	693,19,10
	REVENUE		CAPITAL		TOTAL
PLAN	264,08,00		10,92,00		275,00,00
NON-PLAN	251,52,10		166,67,00		418,19,10
TOTAL:—	515,60,10		177,59,00		693,19,10



## MEDICAL RELIEF AND SUPPLIES



**T**he Centre is directly operating important health activities like provision of health care facilities to its employees and pensioners at the Capital and other major cities in the country. It also provides reliefs and supplies to far flung areas during natural calamities and other unforeseen situations. The Ministry also assists investigations for various crimes through serological and chemical examination services.

### 3.2 Central Government Health Scheme

3.2.1. The Central Government Health Scheme was introduced on 1st July 1954 as the 'Contributory Health Scheme' in Delhi to provide comprehensive medical care facilities to Central Government Employees and members of their families and do away with the cumbersome and expensive

system of reimbursement of medical expenses.

3.2.2 The Scheme, which was started in Delhi/New Delhi with 16 allopathic dispensaries covering 2.33 lakh beneficiaries has grown over the years in both coverage and scope. It has been extended to Bombay, Calcutta, Patna, Madras, Hyderabad, Bangalore, Pune, Nagpur Ahmedabad, Jaipur, Kanpur, Allahabad, Meerut and Lucknow. The peripheral towns of Gurgaon, Faridabad and Ghaziabad have also been covered under the CGHS, Delhi. As on 1.11.90, there were 225 allopathic dispensaries, 13 poly-clinics, 31 ayurvedic dispensaries/units, 33 homoeopathic dispensaries/units, 8 unani dispensaries/units, 1 siddha unit and 3 yoga centres in the cities where the Scheme is in operation (as per details given in the state-



ment on next page). During 1990-91, three allopathic dispensaries have been opened, 2 under CGHS Delhi and 1 under CGHS Hyderabad. The Scheme presently covers 38.81 lakh beneficiaries which include Central Government Employees and other entitled persons. With effect from 10th June, 1985, all the dispensaries have been working in a single shift with augmented evening services. However, some of the dispensaries are being run for a continuous 12 hours on an experimental basis.

3.2.3. Besides Central Government employees, other sector of the population now availing themselves of CGHS facilities include employees of certain autonomous organisations, retired Central Govt. Servants, widows of Central Govt. employees in receipt of family pension, M.Ps. and Ex-M.Ps., Ex-Governors, Ex-Vice Presidents, retired Judges of the Supreme Court and High Courts, Freedom Fighters and the general public (in 14 specified areas in Delhi). The scheme has also been extended to the workers of the Employees State Insurance Corporations, Kanpur, retired employees of Indian Council of Agricultural Research (Non-optees in Delhi/New Delhi) and employees of Kendriya Vidyalaya Sangathan stationed in Calcutta, Madras, Bombay, Bangalore, Hyderabad-Secundrabad, the employees of statutory canteens in the cities where the scheme is functioning (and if they are not covered under any other medical scheme) and the retired employees of N.I.H.F.W., New Delhi and employees of Central Council of Indian Medicine, New Delhi. Since February, 1988, CGHS facilities have also been extended to such of the CGHS employees as are not residing in the covered areas. The press representatives and employees of the Delhi High Court have been extended CGHS facilities with effect from March, 1988 and November, 1988 respectively. CGHS facilities have also been extended to the family members of Central Govt. employees transferred to Jammu & Kashmir.

3.2.4. The facilities under the Scheme include out-patient care provided through a net-work of allopathic dispensaries as well as ayurvedic / homoeopathic / unani dispensaries / units, supply of medicines, laboratory and X-ray investigations, domiciliary visits, emergency treatment, ante-natal care, confinement and post-natal care, advice on family welfare, specialist consultation and hospitalisation facilities at government hospitals as well as private hospitals recognised under C.G.H.S. Since November 1984, Central Government pensioners have been made eligible for reimbursement of the cost of hospitalisation / specialised treatment including cost of artificial appliances. To increase the number of service institutions and offer better services to CGHS beneficiaries, all Government Hospitals such as Army, Naval, Railway, E.S.I. and State Government / Municipal Hospitals have been recognised under CGHS with effect from 8th May, 1986. Domiciliary restriction in utilising the benefit of the Scheme has been liberalised in favour of pensioners. Now Central Govt. pensioners are able to avail themselves of CGHS facilities from their nearest dispensary irrespective of the fact as to whether they are residing within the jurisdiction of the Scheme or not.

3.2.5 In order to expedite disposal of reimbursement of medical expenses, claims, powers to reimburse the cost of artificial appliances have been delegated to the administrative Ministries / Departments. The Deputy Directors of CGHS Organisations have been delegated powers to reimburse the cost of artificial appliances to the pensioners. The Deputy Directors have also been delegated powers to reimburse Aya-Charges.

3.2.6 The outstation pensioners have been allowed to obtain medicines from the approved chemists / Super Bazar through authority slip issued by the concerned Deputy Directors for a period specified by



the specialists at a time.

3.2.7 In September, 1989 CGHS facilities

were extended to freedom fighters. About 1.50 lakh freedom fighters are likely to be benefitted by these services.

NUMBER OF CGHS DISPENSARIES IN DIFFERENT CITIES  
AS ON 01.11.90

(Ref. Para 3.22)

S. No.	Name of the city	Type of the dispensaries							Total
		Allo.	Ayur.	Homeo.	Unani	Poly Clinic	Siddha	Yoga	
1.	Delhi	83	13	13	4	2	—	3	118
2.	Bombay	28	2	3	—	2	—	—	35
3.	Allahabad	7	1	1	—	1	—	—	10
4.	Meerut	6	1	1	—	—	—	—	8
5.	Kanpur	9	1	2	—	—	—	—	12
6.	Calcutta	17	1	2	1	1	—	—	22
7.	Nagpur	10	2	1	—	1	—	—	14
8.	Madras	14	1	1	—	1	1	—	18
9.	Bangalore	10	2	1	—	1	—	—	14
10.	Hyderabad	14£	2	2	2	2	—	—	22
11.	Patna	5	1	1	—	—	—	—	7
12.	Pune	7	1	2	—	1	—	—	11
13.	Jaipur	5	1	1	—	1	—	—	08
14.	Ahmedabad	3	1	1	—	—	—	—	05
15.	Lucknow	6	1	1	1	—	—	—	09
16.	Bhubaneshwar*	1	—	—	—	—	—	—	01
Total		225	31	33	8	13	1	3	314

£ Includes one sub-dispensary.

\* One allopathic CGHS dispensary is functioning for AG's employees only in Bhubaneshwar.

3.3 Safdarjang Hospital, New Delhi

3.3.1 Safdarjang Hospital was started during the 2nd World War as an American Base Hospital. After the war, the activities of the Hospital declined. However, after independence, this hospital was revived and taken over by the Govt. of India as an annexe to Irwin Hospital. Since 1954, the Hospital is functioning as an independent unit under the Dte. General of Health Services. The local administrative head of the Hospital is the Medical Superintendent who is assisted in the discharge of his functions by the Addl. Medical Superintendent, Deputy Medical Superintendent, Heads of various Deptts / Units, Chief Medical Officers and Chief Admn. Officer. The Heads of Departments are responsible for day to day functioning of their respective departments.

3.3.2 Dr. P.C. Rai, Consultant in Surgery,

took over charge as Medical Superintendent with effect from 1.6.90. To tone up the administrative management, he has reconstituted various Committees and also re-allocated duties and responsibilities among senior Doctors and Chief Medical Officers for better functioning of the Hospital.

3.3.3 To ensure punctuality, cleanliness and the quality of clinical services, Medical Superintendents and Heads of the Departament take regular rounds. All Heads of Department are responsible to maintain punctuality in their respective departments. Almost all the life saving/ essential drugs and routine drugs appearing in hospital formulary are in stock. The formularies have been updated very recently. All the essential drugs are supplied to indoor as well as outdoor indigent patients.

3.3.4 The hospital provides various



specialities, super specialities, special clinics and diagnostic services, in addition to numerous essential services like operation theatres and Ambulatory services.

3.3.5 The patients come to the hospital not only from colonies of South Delhi but also from all over the National Capital Region of Delhi and also from remote areas of the adjoining States like Haryana, Punjab, U.P. etc. To overcome overcrowding in the hospital, a separate block in the name of OPD Phase III is under construction. For the Hospital staff, the construction of residential quarters near Dharamsala is also starting soon. Tenders have been invited by the C.P.W.D. Besides, providing specialised medical care to a large number of out-door (above 11 lakh in a year) and in-door patients (about 69 thousands in a year) the Hospital also gives Graduate Education and Training. The Post-Graduate Teaching Programmes are being conducted by the University of Delhi in 11 Departments of the Hospital. In addition, seven training courses are also conducted in various departments of the hospital.

3.3.6 Safdarjang Hospital also imparts education and training through its School of Nursing for the Course of General Nursing and Midwifery affiliated to Punjab Nursing Council.

3.3.7 Recently, Burns and Plastic Department of the Hospital rendered commendable services in saving the life of students who were victims of the self-immolation. The Department of Radiology is further expanding due to installation of 1000 MA, 500 MA and 250 MA X-ray machines. C.T. Scanner and Body Scanner are under installation. The ultrasound machine installed is already functioning. In the STD Department, an Elisa test for AIDS has been started recently.

3.3.8 *Department of Rehabilitation:* Under the National Scheme of Medical Rehabilitation, the Department of Rehabilitation was started in 1967. The De

partment is working with a multi-disciplinary team approach to provide comprehensive integrated rehabilitation services to the disabled persons.

3.3.8(i) The Department caters to a variety of patients including cases of poliomyelitis, amputation, spinal cord injuries, paraplegia and quadriplegia, cerebrovascular accidents with hemiplegia, myopathy, cerebral palsy, nerve injury, poly arthritis, osteoarthritis and other chronic non-specific painful conditions of bones and joints etc. The physiotherapists and occupational therapists extend the various treatment modalities to the patients. The orthotic & prosthetic technicians manufacture and fit the artificial limb and caliper, when required.

3.3.8(ii) During 1990 (upto October, 1990), 17172 new cases and 59641 old cases were attended to in O.P.D. 15 beds are provided (10 male + 5 female) for rehabilitation of paraplegic/quardriplegic cases. The Medical Social Worker of the department takes care of social problems of the patients. If any economic assistance is required, it is being managed through the various agencies for the benefit of the patients. None of the patients has been refused Artificial Limbs & Appliances because of his/her financial limitations.

3.3.8(iii) *Training Programme:* The department is running the following training courses:

- (a) Diploma in Physical Medicine & Rehabilitation.
- (b) Diploma in Orthotics & Prosthetics.
- (c) Certificate Training Course for Multi Rehabilitation Workers.
- (d) Training of Students for Diplomas in Physical Medicine & Rehabilitation conducted by National Board of Examination, New Delhi.
- (e) Clinical training of IInd year students of Diploma in Physiotherapy & Occupational Therapy.



- (f) Internship training of students of Diploma in Physiotherapy and Occupational Therapy.
- (g) Orientation training programme for nurses and trainees of Medical Record Department.

3.3.8(iv) The work of the department has been nationally and internationally appreciated.

3.3.9 All the departments are functioning very well to the satisfaction of the public. Some data is given below relating to this Hospital.

#### DATA—1989

Bed Strength	1357
Bassinets	174
Total Patients admitted	68,924
Adults & Children	55,898
Newborn Infants	13,026
Total No. of Deliveries	13,306
Total No. of Operations	31,567
Total No. of X-ray exams.	1,31,713
Total No. of Lab. tests	12,94,309
Total No. of Out Patients	11,20,964
Accident & Emergency Services	1,29,996
Total No. of Postmortems	1,263

3.3.10 The Doctors of this Hospital have participated in numerous National and International Conferences/Seminars/Workshops etc. A large number of publications have been brought out by this Hospital in Indian and Foreign Journals.

### 3.4 Dr. Ram Manohar Lohia Hospital

3.4.1 Dr. Ram Manohar Lohia Hospital's status and dimensions have changed considerably since its inception. It has a sanctioned bed strength of 800 beds but actual beds in position are 929 including Nursing Home beds and Mini beds in the Emergency Block. The hospital has 29 departments and provides services in all major specialities and few super-specialities like Neuro-Surgery, Plastic Surgery and Cardiology. The Hospital runs special clinics in specialities like Cardiology, Neuro-Surgery, Diabetology

and Nephrology. It caters to the needs of the Central Government Employees, VIPs, MPs, Freedom Fighters and patients from adjoining States (approximately 25% of total patients attending the Hospital). It has an attached Nursing Home of 78 beds for the needs of high officials of the Central Government. This is the only Central Government Hospital where the facility of Head CAT Scan is available.

3.4.2 This Hospital in addition to providing facilities for the under-graduate students of Lady Hardinge Medical College, provides Post-graduate education in various specialities like Surgery, Medicine, Radiology, Paediatrics, Dermatology and Otorhinology. Also, there is a Nursing School for 75 students attached to this Hospital. Diploma in Nursing is awarded by this School. The Hospital has actual staff strength of over 2053 which includes approximately 350 doctors.

3.4.3 *Achievements:* This Hospital in addition to the routine diagnostic and therapeutic services have contributed in various specialised services. A new field of Interventional Radiology with procedures like, Percutaneous Trans hepatic Biliary Drainage, Percutaneous Nephrostomy and Tumour Embolization have been introduced. The facility of Digital Substraction Angiography has been made fully operational. In the Department of Neuro-Surgery, Evoked Potential studies for head injury and brain tumour patients have been started. New sophisticated equipment has been added in the current year like Non-Invasive Cardiac Monitor, 16 Channel Sophisticated EEG Machine and Hyperbaric Oxygen Chamber.

3.4.4 The Hospital provides free and exclusive facility to freedom fighters including supply of medicine. A separate clinical investigative laboratory exists in the Emergency Block which provides round the clock investigative facility in all essential fields. The Hospital provides medical cover to various National and International Conferences held from time to time.



**3.4.5 VVIP Care & Disaster Management:** For VVIP Care, a core team has been organised and a Central Control Room has been set up for the purpose to meet the challenge at very short notice. Similarly, a disaster action Plan has been prepared to mobilise the Hospital at very short notice to deliver the best possible services to the maximum number of patients.

**3.4.6 Academic Field And Inservice Training:** Department of Cardiology and Neuro-Surgery have been approved by National Board of Examination for imparting training to Post-graduates.

**3.4.7** One Consultant in Medicine of this Hospital is recognised as a Prime source person in the field of AIDS.

*Service Statistics of the Hospital From January 1989 Till Date*

1. Total Admissions	36,122
2. Total Discharge	33,170
3. OPD Attendance	8,71,429
4. Casualty Attendance	1,20,654
5. Total Operations conducted	51, 227
6. Total X-rays	1,58,280
7. Bed Occupancy Rate	94.9%

**3.4.8** During this year, 373 cases of Tubectomies, 105 cases of Vasectomies and 1090 of IUD were handled.

### 3.5 Cancer Control Programme

**3.5.1** Cancer is a disease which carries a high rate of mortality unless it is detected and treated early. In India at any given time it is estimated that there are 1.5 million to 2 million cases and almost half a million new cases occur every year. The mortality rate is very high and almost 0.3 million cancer patients die every year. Cancer of the Oral cavity in both sexes and of cervix in women are by far the most common malignancies seen in the country. Breast cancer incidence is also high. It has been estimated that about 36% of the

total cancer cases are related to tobacco.

**3.5.2** Surgery, Radiotherapy and Chemotherapy are the main modalities of treatment of cancer. Surgery is the most effective mode of treatment for early detected cancer cases. In India, less than 20% cases are diagnosed at a stage when the disease is localised (early stage) where surgery will be most beneficial. It is also estimated that about 60% of the cancer cases in India require Radiotherapy while 10% cases need Chemotherapy. Thus, about 3 lakh patients require Radiotherapy every year. It is estimated that one cobalt machine can provide treatment to 600 cases annually. The country has at present 160 Cobalt Therapy units. Surgery facilities are available in all major hospitals. Chemotherapy can be provided at any major hospital in the country, but training of physicians for this purpose is necessary. 80% of the prevalent cases require pain relief measures. About 25% of these cases require oral morphine for effective control of their pain.

**3.5.3** Government of India started the National Cancer Control Programme in an elementary form during 1975-76 when Central assistance was given for purchase of cobalt therapy units to medical colleges at the rate of Rs. 2.5 lakh. This scheme continued during the 6th Plan and 7th Plan periods also with the gradual increase of financial assistance to Rs. 12 lakh per unit. Central assistance is also given at the rate of 0.5 lakh for the purchase of equipment required for establishing early cancer detection centres, subject to the condition that the recipient of Central assistance agrees to provide the trained staff like cyto-pathologists, cyto-technicians/technologists, lab. assistants etc.

**3.5.4** During the 7th Five Year Plan, the Cancer Research and Treatment Pro-



gramme was launched with the following objectives; namely:—

- i) Primary prevention of tobacco related cancer.
- ii) Secondary prevention of cancer of uterine cervix.
- iii) Extension and strengthening of the therapeutic services including pain relief on a national scale through Regional Cancer Centres and through Medical and Dental Colleges.

3.5.5 Starting from the 5th Five Year Plan, the following 10 Regional Cancer Centres have been recognised and financially assisted:—

- a) Gujarat Cancer and Research Institute, Ahmedabad.
- b) Kidwai Memorial Institute of Oncology, Bangalore.
- c) Chittaranjan National Cancer Institute, Calcutta (financed by Govt. of India and Govt. of West Bengal).
- d) Regional Centre for Cancer Research and Treatment Society, Cuttak.
- e) Dr. B.B. Cancer Institute, Guwahati.
- f) Cancer Hospital and Research Institute, Gwalior.
- g) Cancer Institute, Madras.
- h) Institute Rotary Cancer Hospital, All India Institute of Medical Sciences, New Delhi.
- i) Regional Cancer Centre, Trivandrum.
- j) Tata Memorial Centre, Bombay (financed by Department of Atomic Energy).

3.5.6 Under the Japanese Grant Aid Programme, 13 C.T. Scanners have been received and installed in various hospitals. Action has been initiated to procure 2 more CT scanners for installation in Dr. B. Barooah Cancer Institute, Guwahati and Safdarjung Hospital, New Delhi.

3.5.7 During the 8th Five Year Plan more emphasis will be given on prevention and early detection of cancer particularly in

the rural areas. A few districts will be selected for Cancer projects for this purpose during the 8th Plan and these projects will be linked up with existing Regional Cancer Research and Treatment Centres of Govt. Medical Colleges which will supervise and monitor the programme in collaboration with the concerned State Governments. Development of Health Education material and its proper dissemination all over the country will get high priority. In the programme for Health Education and early detection of cancer, voluntary organisations will be involved and suitable assistance will be provided to them.

3.5.8 During the 8th Five-Year Plan, Oncology Wings in selected Medical Colleges/Hospitals in the country will be developed. These Medical Colleges/Hospitals will be selected in the regions where adequate facilities for treatment of cancer are not available at present. The proposal is to develop these Centres all over the country in such a way so that no patient has to travel more than 200 Kms for getting modern cancer treatment facilities.

3.5.9 Palliative and pain relief measures will get due importance in the programme. Under the scheme, financial assistance will be provided to selected District Hospitals for supply of oral morphine/ other pain relief medicines and for pain relief measures.

3.5.10 Simultaneously, the ongoing schemes for assistance to Regional Cancer Centres for their development and financial assistance to Medical Colleges/Institutions for setting up of Cobalt Therapy Units will also continue.

3.5.11 As implementation of the above programme will require a large number of trained personnel, adequate emphasis on training of medical and para-medical personnel will be given during the 8th Plan period.



3.5.12 During 1990-91, funds to the tune of Rs. 20 crore, out of which Rs. 14 crore in foreign assistance, have been provided for the programme.

### 3.6 Nutrition Cell

3.6.1 The Nutrition Cell of the Directorate General of Health Services co-ordinates the nutrition work carried out by the State Nutrition Divisions in different States and UTs. At present 17 States and 2 UTs. have Nutrition Divisions. These Divisions are responsible for conducting the following activities:

- i) Identifying areas where Nutritional deficiencies are high by conducting diet and nutrition surveys.
- ii) Implementation and supervision of nutrition programme (Feeding and Training) implemented by the States or any other Institute or Agency.
- iii) Providing nutrition education and other suitable measures to combat deficiency diseases for improving the general nutrition status of the community.

3.6.2 The Nutrition Cell of the Directorate provides information and guidance to the State Nutrition Divisions for celebrating the National Nutrition Week.

3.6.3 The field unit of the Nutrition Cell has undertaken a project on 'Intensive Nutrition Education to Mothers with stress on promotion of breast feeding'. Apart from education, the Nutrition Cell also conducts regular studies on the acceptability and effect on nutritional status of various nutritious foods including low cost processed foods.

3.6.4 The Nutrition Cell has carried out a sample analysis of the health and nutrition situation of tribals in different regions of the country.

### 3.7 Japanese Encephalitis

3.7.1 Japanese encephalitis though first detected in 1955 in India became a disease of concern in the late 70s. So far, 24 States and Union Territories have recorded the incidence of suspected Japanese encephalitis. Of these, 14 States have reported Japanese encephalitis during the last five years. Japanese encephalitis is a serious public health problem in Assam, Andhra Pradesh, Bihar, Karnataka, Tamil Nadu, Uttar Pradesh and West Bengal. In 1989, the disease was also reported as a problem in Orissa and during 1990 the virus has been detected in Haryana too.

3.7.2 The incidence over the last five years is given below:—

Year	Cases	Deaths
1986	7500	2627
1987	3515	1346
1988	6867	2404
1989	6489	2422
1990 (prov.)	1524	667

3.7.3 Japanese encephalitis is a viral disease transmitted through a specific category of mosquitoes belonging mainly to *Group Culex Vishnui* complex. In view of the viral origin, there is no curative drug available against Japanese encephalitis and no chemoprophylaxis is available.

3.7.4 Until 1990-91 for tackling Japanese encephalitis in the affected States, the Central Government provided assistance out of the NMEP budget provision as there were no specific funds available for the purpose. However, during 1990-91 the Planning Commission approved a separate outlay of Rs. 4.00 crore for prevention and control of Japanese encephalitis. Accordingly action plans have been drawn in consultation with the State Govts. on the basis of the recommendations made by an Expert Committee constituted by the Government of India in December, 1988.



The major activities in these action plans include:

1. Surveillance both clinical and vectors.
2. Early diagnosis and proper management of the patients to reduce fatality.
3. Vector control by undertaking residual insecticidal spraying, malathion fogging/ULV spraying during out-breaks and encouraging the alternative methods of vector control like water management, personal protection, protection of viral reservoirs from mosquito bites, etc.
4. Vaccination of the priority group as supervised administration trials.
5. Investigation of outbreaks for corrective measures.
6. Health education.
7. Training and Research.

3.7.5 An indigenous Japanese encephalitis vaccine developed is being used as supervised administration trial for assessment of field feasibility in 4 States namely Assam, Andhra Pradesh, Uttar Pradesh and West Bengal.

3.7.6 For investigations, confirmation and guidance, collaborative efforts are being undertaken by the NMEP which is the nodal agency for programme implementation. National Institute of Communicable Diseases, Delhi, National Institute of Virology, Pune, School of Tropical Medicine, Calcutta, All India Institute of Public Health & Hygiene, Calcutta, Centre for Research in Medical Entomology, Madurai, Kings Institute, Madras, K.G. Medical College, Lucknow, etc.

### **3.8 Development and Modernisation of Blood Banking and Transfusion Services and Establishment of Testing Facilities**

3.8.1 In 1989-90, the Scheme on Development and Modernisation of Blood Banking and Transfusion Services was reviewed by E.F.C. to provide testing facilities for AIDS under Zonalised Blood Testing Centre for HIV in a phased man-

ner. In the first phase Delhi, Bombay, Madras and Calcutta were provided with 28 Zonal Testing Centres which have been made operational.

3.8.2 Major components of the Scheme are setting up of 37 Zonal Blood Testing Centres for HIV in cities with population of 5.00 lakh and above, State Capitals and Tourist Centres, man power development, modernisation of blood banks and setting up of blood component separation facilities.

3.8.3 *Establishment of Testing Facilities:* The target during 1990-91 is to operationalise 37 Zonal Blood Testing Centres for HIV by providing necessary equipment, trained man power and testing kits. Actual implementation of the programme started in March, 1990. Training centres for HIV testing immediately started their training and 25 Zonal Centres have been provided with trained man power. Equipment like ELISA Reader has been provided to 26 Centres. By the end of October, 1990, 14 Zonal Centres have been operationalised and the rest of the Centres will start functioning in the near future.

3.8.4 Our efforts to provide testing facilities in metropolitan and other cities enabled us screen 6.67 lakh samples of donated blood for HIV from 1st April, 1989 to 31st October, 1990.

3.8.5 *Man Power Development:* Ten training institutes have been identified to provide short-term training course to medical officers and technicians of 162 blood banks. Nine training institutes have been provided with necessary funds, training curriculum and linkages of blood banks to that centre. Four training centres have started training programmes, and till October end 30 personnel completed training in different institutes. Other institutes have drawn up training schedules and training will start in due course.

3.8.6 *Modernisation of Blood Banks:* 146



blood banks have been identified for modernisation under which assistance will be provided for equipment and recurring grants for consumables. During 1989-90, 18 blood banks have been provided with assistance for modernisation. 65 blood banks will be taken up during 1990-91 and the rest in the next financial year.

**3.8.7 Component Separation Facilities:** During the 8th Plan period, 11 institutes will be assisted in setting up blood component separation facilities. This work will be taken up from 1991-92.

**3.8.8 Plasma Fractionation Unit at K.E.M. Hospital:** The Plasma Fractionation Unit at K.E.M. Hospital, Bombay has started functioning. During 1990-91, establishment of two more units, one each at Delhi and Calcutta is under consideration.

### **3.9 Indian Red Cross Society**

**3.9.1** The Indian Red Cross Society was established in 1920 to render medical and other assistance to the sick and injured at war and peace time and manage the funds and gifts received from public for such purposes. Its activities include the mother and child welfare scheme, arrangement of relief to victims of epidemics, earthquakes, droughts, floods and natural and industrial calamity in India and abroad, besides providing para-medical education in fields like first-aid, nursing and blood banking.

**3.9.2** The Govt. of India gives grants-in-aid to the Indian Red Cross Society for its general and blood banking services. There is a budget provision of Rs. 11.50 lakh during the current year for giving grants to the Society.

**3.9.3** Promotion of voluntary blood donation is one of the prime targets of the Society, and the Govt. of India has been providing grants-in-aid to help it in this programme. There is a network of 51

blood banks run by the Red Cross Society in 13 States/UTs.

**3.9.4** The Govt. of India also makes an annual contribution to the International Red Cross. From 1988-89 the contribution was raised from Rs. 2.00 lakh to Rs. 3.00 lakh.

### **3.10 St. John Ambulance Association**

**3.10.1** St. John Ambulance Association is the Ambulance Wing of the Indian Red Cross Society. It performs first-aid duties at public functions, fairs, sport meets, factories, mines and other places requiring urgent attention for safety and care in natural and industrial calamity. It also imparts training in first-aid nursing and allied subjects. It is a well-knit organisation of trained brigade personnel ready to serve.

**3.10.2** Annual grants-in-aid of Rs. 50,000 are being provided by the Ministry of Health & F.W. to the Association with effect from 1989-90.

### **3.11 Medical Stores Organisation**

**3.11.1** The Medical Stores Organisation with seven depots at Bombay, Calcutta, Guwahati, Hyderabad, Madras, Karnal and New Delhi is responsible for procurement and supply of quality medical stores including equipment to various hospitals and dispensaries all over the country at the most economical rates. There are about 1800 regular indentors who draw their requirement from these depots. The Organisation has three chemical laboratories attached to the Medical Store Depots at Bombay, Madras and Calcutta for conducting the quality control tests.

**3.11.2** The Medical Stores Organisation also caters to the needs of hospitals and dispensaries located in rural or suburban areas. It also receives supplies from international agencies like UNICEF, SIDA, WHO, USAID, etc. and distributes them



to various parts of the country. Various drugs and other items required for distribution for running National Health Programmes like National Malaria Eradication Programme U.I.P. and F.W. Programme are handled by the Organisation. It also arranges relief supplies to the victims of natural and national calamity like drought, flood, cyclone, war, agitation, etc. in all parts of the country. The Organisation also arranges gift supplies to foreign countries at the instance of the Ministry of External Affairs.

3.11.3 The Organisation has also taken over the responsibility of making supplies of medical stores to the Central Government Health Scheme (CGHS). The budget provisions are as follows:—

<i>Description</i>	<i>Budget Provision (Rs. in thousands)</i>	<i>1990-91 (B.E.) NON-PLAN</i>
1. Depots	4,32,00	
2. Clearance of handling of International Stores	48,00	
3. Drug manufacture factories (excluding Bio-Lab, Madras)	53,00	
4. Purchase of Material in India & Abroad	64,50,00	
	69,83,00	

3.11.4 In view of the increased activities and important role being played by the Medical Stores Organisation as a whole, certain steps have been taken for improvement in its functioning through in-house testing facilities in the Depots in a phased manner and computerisation for inventory control and financial accounting. Action to provide adequate cold storage facilities in the various Medical Store Depots is also being taken.

## Statistical Data of Medical Stores Organisation

(Rs. in thousands)

<i>Year</i>	<i>No. of Indentors (Approx)</i>	<i>Total Purchase</i>	<i>Total values of stores supplied</i>
1982-83	15,528	16,91,41	18,44,33
1983-84	15,528	19,00,44	21,40,20
1984-85	16,000	37,71,31	40,95,15
1985-86	16,000	45,46,99	46,59,51
1986-87	16,000	58,42,00	59,54,00
1987-88	1,800	56,05,00	50,74,00
1988-89	1,800	67,75,00	1,38,51,00*
1989-90	1,800	65,00,00	1,51,33,05*

\*(Including National Health Prog. Stores)

## 3.12 Department of Serologist and Chemical Examiner, Calcutta

3.12.1 The Department of Serologist & Chemical Examiner is the reference laboratory of the Govt. of India in the Directorate General of Health Services, Ministry of Health & F.W. for medico-legal work. The laboratory undertakes analysis of blood and other stains on the clothes, garments, weapons and other materials seized by the Police in course of investigation of criminal cases. These materials are received from different States of the country and its reports are presented to the Courts of Law. The above materials are sent to this laboratory through the Forensic Science Laboratories/Chemical Examiners of different States all over the country including General Forensic Science Laboratories.

3.12.2 The Department is also concerned with the production and sale of Venereal Diseases Research Laboratory (VDRL) diagnostic reagent. This is used in the diagnosis of syphilis and large number of diagnostic tests can be done quickly. The department also manufactures antisera (antibody) against different animal species required for differentiation and detection of origin of blood for medico-



legal cases and also for laboratory and research purposes. It also undertakes serological tests for diagnosis of venereal disease i.e. syphilis. Besides the above, immunological research and training are also undertaken. The department is also engaged in separation and raising the monospecific antisera against the different classes of Human Immunoglobuline. This department has already started a programme for manufacturing anti-bacterial sera particularly against Salmonella

Group of Organisms. A scheme for starting Regional STD Reference Laboratories has also been sanctioned and work is in progress.

3.12.3 The department continued analysis of medico-legal exhibits seized by the police in connection with the criminal cases as in the previous year. The statistical information regarding activities of the department is given below:

	1989-90	1990-91 for 8 months from April to November, 90	Physical Target for 1990-91	Financial Target for 1990-91
Medico-legal cases analysed & reported on	5,898	2,747	6,000	6 lakh
No. of items analysed & reported on				
a) For origin of species	21,633	11,696	18,000	—
b) For blood group	19,770	10,192	15,000	—

3.12.4 The department is continuing production and sale of various types of antisera and other diagnostic reagents and production and sale of VDRL antigens and buffered saline diluent as in previous years. It is also continuing research and training of officers and

staff of different State Forensic Science Laboratories of our country. Serological tests for syphilis on samples received from different hospitals in West Bengal are being continued as in the previous year. The statistical informations are given below:

Production of Antisera	1989-90	1990-91 (for 8 months from April to Nov. 90)	Physical Target for 1990-91	Financial Target for 1990-91
1	2	3	4	5
Antisera	9,837 ml.	8,059 ml.	12,500 ml.	Rs. 2,61,000 ml. (Approx.)
Lectin	2,725 ml.	14 ml.	25 ml.	400 ml.
Others	—	—	—	—
	12,562 ml.	8,073 ml.	12,525 ml.	2,61,400



<b>Supply of Antisera</b>	<b>1989-90</b>	<b>1990-91</b> <i>(for 8 months) from April to Nov. 90</i>	<b>Physical Target for 1990-91</b>	<b>Financial Target for 1990-91</b>
i) Antisera Lectin	11,335 ml.	5,480 ml.	8,850 ml.	1,85,000
	22 ml.	14 ml.	25 ml.	400 ml.
ii) Antisera for Deptt. use	3,290 "	2,430 "	3,650 "	76,000
	14,647 ml.	7,924 ml.	12,525 ml.	2,61,400

(for Medico-Legal Section)  
Production of VDRL Antigen  
& Buffered Saline Diluent  
(in amps)

	<b>1989-90</b>	<b>1990-91</b>	<b>1990-91</b>	<b>1990-91</b>
VDRL Antigen	54,530 amp.	20,407 amp.	45,000	6,30,000
Buffered Saline Diluent	54,530 "	20,407 "	45,000	

Sale of VDRL Antigen  
with Buffered Saline  
Diluent (in amps.)

a) Supply to Medical Store Depot	5,500	5,000	45,000	6,30,000
b) Direct sale from the department to consumers	44,950	11,040	—	—
<b>Total</b>	<b>50,450</b>	<b>16,040</b>	<b>45,000</b>	<b>6,30,000</b>

3.12.5 *Research:* Research in immuno-  
globulin and production techniques is be-  
ing continued.

3.12.6 *Serological Test for Venereal Dis-  
eases:*

	<b>1989-90</b>	<b>1990-91</b> <i>(for 8 months) from April to November, 1990</i>	<b>Physical Target for 1990-91</b>	<b>Financial Target for 1990-91</b>
Samples for cardiolipin complement fixation test.	2408	1469	2400	Test done free of cost
Samples for VDRL test	2408	1469	2400	

### 3.13 Natural Disasters

3.13.1 The geographical attributes of our  
country make it extremely vulnerable to

natural calamaty. During 1990, 17 out of  
31 States/Union Territories were affected  
by floods during the monsoon in which  
209 districts having a population of



223.16 lakh were affected and a total of 1,312 lives were lost. Timely action on the part of the government averted any major epidemic although normal incidences of most diseases were observed.

3.13.2 During the year there was a major cyclone in May, which passed through Tamil Nadu and Andhra Pradesh. The intensity of the cyclone was comparable to that of the 1977 Andhra Pradesh cyclone which had taken a toll of 8,504 lives. In this year's cyclone every measure was taken to prevent any loss of life and provide all necessary medical assistance to the cyclone affected population. The death toll in this year's cyclone has been reported as 928. Medical assistance in the form of 50 tonnes of bleaching powder and 10 lakh doses of Cholera vaccine was provided by the Central Government. There was also a major flood in Gujarat in August this year. As a result of this flood an assistance of some medical stores was sought by the Gujarat Government. The supply consisting of 500 metric tons of DDT, 50% and 2.5 lakh Primaquine (7.5 mg) was promptly made to them.

#### 1. Central level:

- i) At the Central level, the existing contingency plan was put into operation. As per plan, the drought and flood contingency plan was circulated to all the States during May-July, 1990.
- ii) Medical Stores at the Central Stores at Karnal, Bombay, Madras, Hyderabad, Calcutta and Guwahati were kept in readiness.
- iii) C.R.I. Kasauli was also in readiness to supply vaccines. 10 lakh doses of Cholera vaccine were supplied to the Andhra Pradesh Government. 20 thousand doses each of Cholera and TAB vaccine were supplied to Jammu & Kashmir.
- iv) During the crisis situations; constant contact was maintained with the respective Directors of Health

Services to enable the D.G.H.S. keep an eye on the progress of relief measures.

- v) The crisis management group of the Central Government of which the Director (EMR) was a member met daily during the crisis situations.

#### 2. State & District level:

Preventive and curative measures were taken at the State & District level.

#### 3.13.3 Relief Supplies During 1990

##### 1. Medical Relief Supply to Romania

The Ministry of Health have arranged and supplied Medical Stores worth Rs. 30.00 lakh to Romania in Jan. 1990, as per request by the Ministry of External Affairs, Govt. of India, on humanitarian grounds.

##### 2. Medical Relief Supplies to Republic of Afghanistan

Medical Stores worth Rs. 95,61,175/- were sent to the Republic of Afghanistan as per request by the Ministry of External Affairs, Govt. of India during April-May, 1990 on humanitarian grounds.

##### 3. Relief Supplies to Angola

Medical relief supplies worth Rs. 4,92,067/- were arranged. Ministry of Health also deputed 2 Specialist Doctors to Angola for controlling the Cholera outbreak in that country.

##### 4. Relief Supplies to Tanzania

A gift of medicines worth Rs. 5.00 lakh (approx.) was sent to the Govt. of Tanzania as Govt. of India's relief assistance as per request by the Ministry of External Affairs.



## 5. Relief Supplies to Iran

On the request of the Ministry of External Affairs the Ministry of Health have arranged Medical Stores and other materials worth Rs. 1.00 crore as Govt. of India's relief to earthquake victims of Iran. Two types of items were procured:

- a) Medicines and medical equipment to the tune of Rs. 60.00 lakh.
- b) Materials and supplies for Rs. 40.00 lakh.

## 6. Relief Supplies to Philippines

We have arranged Medical Stores worth Rs. 5.00 lakh as Govt. of India's relief assistance for earthquake victims of Philippines.

## 7. Arrangement for Post-Mortem Services during Doctors Strike in Uttar Pradesh

Elaborate arrangements were made by the Ministry of Health in Delhi, Bihar, Haryana, Madhya Pradesh and Uttar Pradesh for post-mortem examination of bodies brought by the U.P. Police during the doctors strike in U.P. in April, 1990.

### 3.14 Hospital Services Consultancy Corporation (India) Limited, New Delhi

3.14.1 Hospital Services Consultancy Corporation (India) Ltd., New Delhi, which is under the administrative control of this Ministry, has emerged as a leading consultancy organisation in the Health Sector in India and abroad. The Company has implemented the following assignments, to highlight a few, within India and abroad, during the year under report:—

- (a) Preliminary project report, cost estimates and detailed engineering drawings for 500-Bed Referral Hospital, Dimapur (Nagaland).
- (b) Planning, design, tender documents

and detailed working drawings for 180-Bed Jawaharlal Nehru Hospital, Rose Belle, Mauritius.

- (c) Feasibility report and preliminary cost estimates on setting up of two Maternity Clinics in Luanda (Angola).
- (d) Supply, installation and commissioning of a Wholebody CT Scanner, Gamma Camera and Radio Isotope Laboratory, including supply of Radioisotopes and associated HVAC and standby energy supply systems, civil works and interior design for the Nuclear Medicine Image Centre, Kathmandu (Nepal).
- (e) Planning, design and detailed consultancy and engineering services for the 200-Bed Hospital at Bhuli for Bharat Coking Coal Limited, Dhanbad (Bihar).
- (f) Planning, design and detailed consultancy and engineering services for the 100-Bed Hospital at Koyla Nagar for Bharat Coking Coal Limited, Dhanbad (Bihar).
- (g) Preparation of feasibility report for the Master Plan, revised cost estimates, technical drawings as also supply and installation of medical equipment to two Hospitals at Gaylegphug and Thimphu, Bhutan.
- (h) Preparation of the Master Plan and Model for Institute of Nuclear Medicine and Allied Sciences, New Delhi.
- (i) Planning and basic design drawings for the 100-Bed NOIDA Medicare Centre at NOIDA (U.P.).
- (j) Planning and basic architectural drawings for the 100-Bed Jaya Diagnostic & Research Centre Limited, Hyderabad (Andhra Pradesh).
- (k) Procurement, supply and installation



of medical equipment to two Hospitals in Botswana under 'AFRICA FUND'.

(l) Preparation of the project report and feasibility study of a 300-Bed Modern Super-speciality Hospital at Calcutta for Peerless General Finance Group, Calcutta.

(m) Planning, design and preparation of basic architectural drawings for 100-Bed Hospital for Raghava Health Care Limited, Kakinada (Andhra Pradesh).

(n) Supply, installation and commissioning of the medical equipment to 180-Bed Jawaharlal Nehru Hospital at Rose Belle, Mauritius.

3.14.2 Some of the prestigious projects at different stages of implementation during the year are as follows:—

(i) 500-Bed Referral Hospital, Dimapur (Nagaland):

Site supervision and quality control of construction of OPD Block, Casualty Block, Maternity Block, Services Block and Arrival Complex.

(ii) 200-Bed Hospital at Bhuli For BCCL, Dhanbad:

Construction of Blocks A & B has started and the work is well in progress.

(iii) Installation of Medical Equipment at 340-Bed Hospital at Kandal, Kampuchea (Expansion Project):

Orders for the complete range equipments have been placed. The assembly and installation team will visit Kampuchea in April, 1991.

(iv) Moka Eye Hospital, Mauritius:

Orders have been placed for equipments worth about Rs. 35 lakh. Processing for further equipment is in

progress, pending receipt of further sanction of funds from the Ministry of External Affairs and clarifications about certain new items by the Government of Mauritius. The despatch is expected to be completed by June, 1991.

(v) Indira Gandhi Institute of Child Health, Kabul, Afghanistan (Expansion Project):

HSCC has already despatched equipments worth about Rs. 16 lakh for this project. Due to the prevailing situation in Afghanistan there has been some delay in despatch of equipment for this project. Action is being taken to despatch further equipments which are lying ready for despatch but delayed due to lack of space in the aircrafts.

(vi) Regional Medical College, Imphal:

Project report including the Master Plan layout has already been submitted to the North-Eastern Council, Shillong for their approval.

(vii) North-Eastern Indira Gandhi Regional Institute For Health and Medical Sciences, Shillong:

The construction work for the 30-Bed Speciality Services Centre has been completed and equipments worth Rs. 10 lakh (approx.) supplied and installed in time. The work for the main Institute will start after the Director is appointed.

(viii) 101-Bed Chandadevi Hospital, Shillong:

R.C.C. drawings for the construction work of two buildings have been completed and submitted to the Client. Clearance of the loan from Guwahati Office of IDBI is awaited by the Client.



(ix) *Naval Hospital Project "Sea Bird" at Karwar:*

The Preliminary project report was completed on the basis of which approval of the Client has been obtained. Final detailed project report including basic drawings have been submitted to E.I.L., the main Consultant. These are under examination by the Navy Officials.

(x) *Pearless Hospitex Hospital & Research Centre Project, Calcutta:*

The sanction for building plans from the Calcutta Municipal Corporation (CMC) is awaited by the Client. Detailed drawings for the main Hospital Buildings are under preparation. The soil testing has been completed and the construction of boundary wall is nearing completion. Tender documents for Nurses' and Doctors' Hostel have already been submitted. Approval of Calcutta Metropolitan Development Authority is awaited for land use.

The tender documents for piling work have also been prepared and sent to the Client. The tender has been called and finalisation of the work order is under progress. The drawings for main Hospital Complex were submitted to Calcutta Metropolitan Corporation on 31.8.1990. The piling work is expected to start at the site in the last week of December 1990.

(xi) *Centralised Accident Trauma Services (CATS), New Delhi:*

Preliminary concept drawings have already been submitted by HSCC. A 5-member team led by the Chief Secretary, Delhi Administration visited a number of similar institutions in Europe for formulating the project brief. The construction of the site office is in progress. Soil inves-

tigation and site clearance work etc. are yet to start and expected to be taken up after the monsoons. The final drawings for project approval has been submitted to the Client on 30.12.1990.

(xii) *National Institute of Biologicals (N.I.B.):*

This projects is being set up at NOIDA with the financial cooperation from USA and Japan. HSCC has already received the Letter of Intent for the consultancy and supervision work for this project from the Ministry of Health and Family Welfare. This is a major landmark in the consultancy sector, as HSCC will be exposed to and interact with the latest State of the Art Technology available in the USA and Japan. Hi-tech designing in laboratory planning and design work required for this topmost National Level Institute will elevate HSCC's capabilities, as this will be the only Institute of its kind in Asia outside Japan, introducing the latest and most sophisticated technology in the country in this specialised sector. HSCC has prepared the preliminary schematic plan, area statement and cost estimates for the design, construction works and fixed equipment; which have been included in the EFC Memo.

(xiii) *Diagnostic Centre For Hindustan Zinc Ltd., Udaipur:*

The letter of intent from the Client has been received. Preliminary investigation for preparation of the project report has already started and a team of HSCC experts visited the project site.

(xiv) *Supply of Equipment to Aden:*

Orders have already been placed



pending receipt of the consignee's particulars by the Ministry of External Affairs. The equipments are lying ready for despatch. The Corporation has achieved more than the financial targets for 1989-90 and declared a dividend of 17% on the paid-up capital of its shareholders, the highest so far. The Corporation has earned a profit of Rs. 19.93 lakh after tax as against Rs. 19.33 lakh in the previous year. This is the highest achievement of the Corporation since its inception in March, 1983.

According to B.P.E. Public Enterprises Survey presented to the Parliament, the Corporation was second among all the Public Sector Undertakings in India by generating a gross profit of 55.93% in 1987-88 and 56.94% in 1988-89 on the capital employed. In the opinion of the financial experts, the percentage of return on capital employed is the best indicator of the financial performance of a company.

Against the equity capital of Rs. 40 lakh the Corporation has earned Rs. 43.33 lakh as profit (before tax) in 1989-90 alone. During this period, the Corporation contributed by way of tax and dividend Rs. 30.20 lakh. As on 31st March, 1989 the reserves and surpluses gene-

rated by the Corporation amounted to Rs. 33.06 lakh.

3.14.3 *Use of Hindi*: The progress of implementation of Official Language Act, 1963 and Rules framed thereunder is quite satisfactory. HSCC has taken necessary steps to implement the Official Language Act. Among other activities Officials of HSCC were sent to attend the Hindi Workshops held in Calcutta & Jaipur.

3.14.4 With all its present workload, a tremendous growth is envisaged in the near future. The Corporation renders consultancy service in hi-tech area of computerised Bio-medical Engineering and modular hospital planning in a number of developing countries, ensuring South-South Co-operation in the Health Care Sector.

3.14.5 The World Health Organisation has also recognised HSCC's strength as an organisation which can train personnel from other developing countries in the field. In the year under review they deputed the following senior officials from Bangladesh to HSCC for updating their knowledge and expertise in Hospital Design:—

- (1) Mr. Shah Alam Zahiruddin,  
Chief Architect.
- (2) Mr. Mohamad Shailudullah,  
Deputy Chief Architect.



## NATIONAL HEALTH PROGRAMMES



**N**umerous health programmes have been undertaken at the national level for controlling major communicable and other diseases. Central assistance is provided to support programmes which are very crucial for reducing mortality and morbidity caused by these diseases. Progress achieved during the year under report in these programmes is discussed in this chapter.

### 4.2 National Malaria Eradication Programme

**4.2.1 Epidemiological Situation of Malaria:** Since the implementation of the Modified Plan of Operation, there has been a gradual downward trend in malaria positive incidence in the country as is evident from the table given on the top in the next page.

**4.2.2** From the table on next page it is observed that as against 6.47 m. cases in 1976, there were 2.02 m. cases in 1989, showing a reduction of 68.78% over a period of 12 years. The incidence of *P. falciparum* (P.f.) has also decreased from 753713 in 1976 to 745219 in 1989 showing a marginal reduction of only 1.13%.

**4.2.3** During 1989, as per reports received up to December, 1989, there was an increase of about 8.78% in positive cases and 8.73% in P.f. cases as compared to the corresponding period of 1988.

**4.2.4 Surveillance Operations:** An analysis of the malaria situation in the country over the nine years, 1981 to 1989, shows that the number of blood smears examination fluctuated from 64.29 million to 71.58 million.



## Malaria Incidence and Mortality related to Malaria

(Ref. Para. 4.2.1.)

Year	B.S.E.* (in millions)	ABER*	+ve Cases	SPR*	P.f.* Cases	SFR*	API*	Deaths
1976	55.98	9.73	6467215	11.55	753713	1.38	11.24	59
1985	68.13	9.38	1864380	2.74	545005	0.80	2.57	213
1986	67.69	9.18	1792167	2.65	638276	0.94	2.43	323
1987	72.53	9.63	1663284	2.29	618574	0.85	2.21	188
1988	75.70	9.87	1854830	2.45	685407	0.91	2.42	209
1989 (Prov.)	71.58	9.40	2017623	2.82	745219	1.04	2.65	268

\*Note Abbreviations stand for:  
B.S.E. = Blood Slides Examination  
ABER = Annual Blood Examination Rate  
SPR = Slide Positivity Rate

SFR = Slide Falciparam Rate  
API = Annual Parasite Index  
BHC = Benzene Hexa Chloride

4.2.5 ABER, which is the index of operational efficiency is noted to fluctuate from 9.18 to 9.87% during the last nine years.

4.2.6 Spray Operations : During 1989, the

projected population with 2API and above in the country was 370.27 million and the same was required to be sprayed. The achievement registered is given in the table below:

### Progress in Population Covered in Spray Operations in 1989

(in millions)

Population Targets for Spray				Average Population covered			
DDT	BHC	MAL.	TOTAL	DDT	BHC	MAL.	TOTAL
223.27	120.20	26.80	370.27	123.23	45.66	7.02	176.00

4.2.7 On analysis of the spray operation reports received from the States/U.Ts., it is found that the spray operations are not carried out as per norms. Usually, the spray operations are either started earlier or delayed or extended beyond the transmission season which nullifies the purpose of spray operations. Further, the targets projected for spray are not met due to lack of funds or delayed sanction or release of funds.

### Population Projected for Spray for 1990

(in millions)

DDT	BHC	MAL.	TOTAL
151.60	86.98	26.86	265.44

4.2.8 Budget : The NMEP is a Category II

Centrally Sponsored Scheme on 50:50 fund sharing basis between the States and the Centre.

4.2.9 The budget provision and estimated expenditure under 50% Central Share is as follows:

(Rs. in lakhs)

Year	Budget provision	Actual/estimated expenditure
1985-86	8868.00	8856.91
1986-87	8500.00	7815.14
1987-88	8200.00	8486.98
1988-89	8300.00	8750.00
1989-90	8900.00	8862.17
1990-91	8200.00	—



4.2.10 *Urban Malaria Scheme (UMS)*: The Urban Malaria Scheme (UMS) came into effect in 1971. The main objective of the scheme is to control malaria by reducing the vector population in the urban areas through recurrent anti-larvel measures. The Ministry has sanctioned the scheme in 133 towns distributed in 17 States and 2 Union Territories but the State Governments have implemented the scheme in 128 towns till now. The States of Karnataka, Orissa, West Bengal and Rajasthan have not implemented the scheme in 5 towns. The malaria cases recorded in 1989 in 120 towns were 1,90,182.

4.2.11 It is observed that 120 out of 128 towns from where comparable data was available showed an increase in malaria cases during 1989 as against 1988. Ahmedabad, Madras and Delhi etc. re

corded an upward trend but Hyderabad and Bombay showed a downward trend in comparison with the corresponding period of 1988.

4.2.12 Madras, Delhi and Bombay recorded 45,573, 10,761 and 3,274 cases of malaria respectively during 1989.

### 4.3. Kala Azar

4.3.1 Kala-Azar has become a serious public health problem in Bihar and West Bengal. After its resurgence in Bihar in the early 70s, the disease spread from 4 districts to adjoining areas and now Kala-Azar has turned endemic in 29 districts of Bihar and 9 districts of West Bengal. The disease is on an increasing trend and the incidence for the last five years is given below:

(Ref. Para 4.3.1)

Year	Bihar		West Bengal		Total: Country:	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
1986	14079	47	3718	25	17806	72
1987	19179	77	4447	10	23685	94
			( + 19 suspected)			
1988	19639	123	3068	2	22739	131
			( + 3 suspected)			
1989	30903	477	3573	20	34489	497
1990	54005	590	2917	16	56971	607
(Prov.)						

4.3.2 In view of the rising problem, the State Governments and Government of India initiated control measures for curbing the menace. Until 1990-91, assistance by the Government of India was provided to the States out of the NMEP budget provision as there was no specific fund available for Kala-azar control. The assistance included insecticides, imported drug pentamidine and cash. During 1990-91, for the first time, the Planning Commission approved an outlay of Rs. 3.00 crore for control of Kala-azar. Accordingly, necessary action plans were developed

for a total estimated cost of Rs. 5.00 crore for Bihar and Rs. 1.00 crore for West Bengal to be shared on 50:50 cost sharing basis between the Centre and the States.

4.3.3 The strategy of the action plan broadly includes three major activities; (1) Interruption of transmission by reducing vector (sandflies) population by undertaking indoor residual insecticidal spraying twice annually; (2) Early diagnosis and complete treatment of Kala-azar cases; and (3) Health education for community awareness and involvement.



4.3.4 In view of the financial constraints in taking up an effective control strategy all over the affected areas, the areas have been prioritised on the basis of the incidence. Accordingly, the spray strategy also varies from area to area. The entire affected areas are to be covered under DDT spraying in 10 highly affected districts of Bihar, whereas in other low endemic areas focal spraying is being undertaken. The priority areas cover about 24 million population as against a total of 44 million population at risk in Bihar and about 5.5 million population in West Bengal.

4.3.5 To ensure optimum utilisation of available limited resources, a concept of district action plan development has also been followed. The Government of India, the State level officials and the District level officials developed a realistic and feasible action plan in consultation with the district magistrate in the field itself. The major emphasis in the district plan is to ensure proper logistics and to make different functionaries at various levels responsible and accountable for Kala-azar activities.

#### 4.4 National Filaria Control Programme

4.4.1 Filariasis is a major public health problem in India. Whenever the disease becomes chronic, it is irreversible. The disease has been prevalent throughout India except Jammu & Kashmir, Punjab, Himachal Pradesh, Mizoram, Meghalaya, Tripura, Manipur and Nagaland. Present

estimate indicates that about 364 million people are living in 174 known endemic districts of which about 99 million are living in urban areas and the rest in rural areas.

4.4.2 For the control of filariasis, the National Filaria Control Programme was launched in 1955. Under the programme, the following activities are being undertaken:

1. Delimitation of the problem in hitherto unsurveyed areas.
2. Control in urban areas through:
  - (a) Recurrent anti-larvel measures.
  - (b) Antiparasitic measures.

4.4.3 *Present set up* : The following is the present set up in endemic States/Union Territories:

Control Units	—	204
Survey Units	—	27
Clinics	—	192

4.4.4 *Progress*: At present, about 41 million people in urban areas are being protected through anti-larval measures by 204 control units and 192 clinics are giving treatment with Diethylcarbamazine to clinical cases and microfilaria carriers.

4.4.5 *Achievements*: It is observed that 94 per cent of the towns, where control measures are in operation for more than five years, have shown marked reduction in microfilaria rates.

4.4.6 Budget and Expenditure are given in the Table below:—

**Budget and Expenditure in National Filaria Control Programme**

Year	Budget			(Rs in lakhs)		
	Cash	Kind	Total	Cash	Expenditure Kind	Total
1	2	3	4	5	6	7
1985-86	40.00	92.00	132.00	40.00	100.55	140.55
1986-87	50.00	100.00	150.00	36.89	113.11	150.00



1	2	3	4	5	6	7
1987-88	50.00	100.00	150.00	73.95	76.05	150.00
1988-89	45.00	155.00	200.00	64.26	135.74	200.00
1989-90	64.00	154.00	218.00	69.87	116.11	195.98

#### 4.5 National Leprosy Eradication Programme

**4.5.1 Problem:** Leprosy continues to be a major health and social problem in India as about one third of the world's total leprosy patients are found in our country. One fifth of the total estimated 4.0 million leprosy patients of the country are infectious cases. One fifth are children 15-20% of the total leprosy cases have deformities. In 196 districts of the country, there are 5 or more cases of leprosy for every 1000 population. In another 239 districts, there are less than 5 leprosy cases for every 1000 population and no district is free from leprosy. 430 million people of the country live in the above 196 high endemic districts.

**4.5.2 Priority and Objectives:** The National Leprosy Control Programme started its operation in 1956 and in 1983, the programme was redesignated as the National Leprosy Eradication Programme with the objective of arresting the disease in all the known leprosy patients by 2000 AD. During the Sixth and Seventh Five Year Plan periods (1980-1990), it has been a 100% Centrally sponsored Plan scheme.

**4.5.3 Infrastructure:** By the end of March 1990, there existed 719 Leprosy Control Units, 894 Urban Leprosy Centres, 244 District Leprosy Units, 6097 SET Centres, 49 Leprosy Training Centres, 291 Temporary Hospitalisation Wards, 39 Sample Survey cum-Assessment Units, 75 Reconstructive Surgery Units etc. under the Programme.

**4.5.4 Objective Achievement:** At the end of March, 1990, 2.56 million leprosy cases were on record and 2.14 million of them

were under treatment. A total of 121971 cases were detected, 120419 brought under treatment and 155776 cases were discharged during 1990-91 up to August, 1990. This reflects the target achievement of 79.3% for case detection, 78.3% for case treatment, 42.4% for case discharge. However, the actual achievement will be much higher as this report includes data submitted by only 8 States/UTs up to August, 1990.

**4.5.5 Voluntary Participation:** About 285 voluntary organisations are playing important roles in detection of leprosy cases, education of the patient and the community and in treatment of leprosy patients. These voluntary organisations cover a total population of 60 million spread over different areas. As per their report 8.20 lakh leprosy cases are on record and 7.61 lakh cases under treatment. In addition, many organisations are also providing rehabilitation services and training of leprosy staff. Grants-in-aid are also given by the Government of India, Ministry of Health and Family Welfare, to voluntary organisations involved in survey, education and treatment activities under the NLEP. During this year, the government has sanctioned the upward revision of grants-in-aid to voluntary organisations.

**4.5.6 Rehabilitation:** Thirteen Leprosy Rehabilitation and Promotion Units located in different parts of the country are providing facilities for surgical correction of the deformed leprosy patients and the vocational training of disabled cured leprosy patients. Besides this, many voluntary organisations are also engaged in medico-social and vocational rehabilitation of leprosy patients.



**4.5.7 Health Education:** High priority has been accorded to public awareness of the programme in view of the stigma attached to the disease. About Rs. 50 lakh is being distributed to States/UTs. every year along with broad guidelines for its utilisation. The educational materials required for the States/UTs are being prepared/procured and disseminated to peripheral units for their use. Leprosy films on 7 topics and 15 types of educational materials have been developed in bulk at the Central level and the same have been distributed to all States/UTs. 50 medical colleges and 43 leprosy training centres have been supplied with colour TV/VCR sets and video tapes. Tapes on 14 topics have been developed and distributed to all these institutions. Besides this, Rs. 3,000/- per month is being spent by every district taken on MDT for promotion of public awareness. Leper's Act has been repealed by most of the States except Andhra Pradesh, Assam, J&K, Punjab and Bihar, where it is under process of repeal.

**4.5.8 Monitoring and Evaluation:** It is an in-built component of the programme. Monthly and quarterly target achievement reports are sent to the Headquarters by the States. Districts under MDT Projects also send monthly achievement reports to the DGHS. For assistance in the monitoring of the programme, 13 posts of Consultants and 20 posts of Leprologists have been created. The programme has been subjected to an independent evaluation in 1986, 1987 and November/December, 1989.

**4.5.9 Training:** 49 leprosy training centres are functioning in the country to provide training to the medical and para-medical staff under NLEP. Out of these, 14 centres are being run by voluntary organisations, four centres are under DGHS and one centre is under ICMR. The training syllabus has been reviewed and the same has been distributed to all the leprosy training centres to follow a uniform pattern and maintain the basic

training standard. The medical staff are given a stipend of Rs. 800/- p.m. and para-medical staff are given Rs. 620/- per month as stipend during basic training in leprosy. Honorarium is also given to guest lecturers @ Rs. 60/- per lecture for 1 to 1½ hour's duration by the Government Leprosy Training Centres. Out of the total of 20,258 technical NLEP staff in position, 17,841 have been given basic training in leprosy. Priority is now being given to the backlog of untrained staff and recognition has now been given to 4 more leprosy training centres bringing the number of leprosy training centres to 49.

**4.5.10 Budget:** Rs. 65 crores was allocated for the Seventh Plan period (1985-1990) for the programme. An additional outlay of Rs.20 crore was provided for 1989-90 for the programme. Thus the total expenditure during the 7th Plan was Rs. 85.88 crore. During 1990-91, an outlay of Rs. 23.00 crore has been provided for the programme.

**4.5.11 Multi Drug Treatment:** At present there are 130 endemic districts covering a population of 283 million with leprosy case load of 2.15 million patients under MDT. The remaining 66 districts are proposed to be covered under MDT in a phased manner by 1992 out of which 33 districts are proposed to be taken up during 1990-91. 11 endemic districts have completed MDT over 5 years where the aggregate prevalence rate has come down to less than 2 cases per 1000 population compared to over 10 cases per thousand population before MDT. The annual case detection rate has also been reduced by 60 to 70%. The deformity rate has also come down among new cases and the relapse rate among MDT cured cases is less than 1% in these districts. 28 low endemic districts have also been sanctioned MDT during 1989-90 in addition to the 5 low endemic districts sanctioned earlier. The total case load of leprosy has been reduced particularly in Andhra Pradesh, Tamil Nadu, Maharashtra and Gujarat. All endemic districts of Tamil Nadu, Andhra Pradesh, Gujarat, Karnataka and



Pondicherry have been covered under MDT. All endemic districts of Maharashtra except Greater Bombay have been covered by MDT. MDT has also been started in Lakshadweep where the prevalence of leprosy has thus been reduced.

**4.5.12 Research :** Three candidate leprosy vaccines have been cleared by the Ministry for mass field trial to study their efficacy. These vaccines are being tried in Solapur District of Maharashtra, Chinglepattu District of Tamil Nadu and Kanpur District of Uttar Pradesh. It will take at least five years to arrive at any conclusion regarding their effectiveness and utility under the programme.

#### **4.6 National Tuberculosis Control Programme**

**4.6.1** Tuberculosis is a major public health problem in India. Nearly 1.5% of the total population is estimated to be suffering from radiologically active tuberculosis of the lungs with 0.4% as sputum positive or infectious.

**4.6.2** Out of about 440 districts in the country, up to the end of September 1990, 378 districts have been provided with District TB Centres equipped with essential equipment and manned by trained staff for undertaking District-wise T.B. programme in association with general health and medical institutions. In addition, there are about 330 TB clinics in the country mostly located in big cities and towns to look after the needs of the local population.

**4.6.3** About 46,000 beds are available in the country for treatment of seriously sick T.B. patients.

**4.6.4** T.B. Training and Demonstration Centres have been established in the major States of the country to undertake the basic training of medical and para-medical personnel required for the programme.

**4.6.5** Anti-T.B. drugs for free treatment

of T.B. patients are being supplied to T.B. clinics run by the State Governments as a Centrally Sponsored Scheme on 50:50 sharing basis between the Centre and the States. The supply of anti-TB drugs to TB Clinics run by Voluntary bodies and supply of material, equipment and anti-TB drugs to Union Territories, however, continue as 100% Centrally Sponsored Schemes. Swedish International Development Agency (SIDA) continues to assist the National T.B. Control Programme as per the agreement between the Government of India and SIDA authorities. The SIDA authorities have agreed to supply X-ray units with Odelca Cameras, miniature X-ray film rolls, vehicles and limited quantities of Rifampicin and Pyrazinamide for short course chemotherapy pilot study and Microscopes to the needy rural PHC's to augment the case finding activities in rural areas.

**4.6.6** As part of the new strategy in the treatment regimens under the National Tuberculosis Control Programme, Short Course Chemotherapy drug regimens containing Rifampicin and Pyrazinamide have been introduced in 212 districts of the country so far. Introduction of these regimens in 1990-91 in another 30 districts of the country has been proposed. More districts are expected to be brought under these regimens in a phased manner in the ensuing years. These regimens will reduce the duration of treatment of the tuberculosis patients from 18 to 24 months to 6 to 8 months.

**4.6.7** As a result of the government's high priority to the National Tuberculosis Control Programme, essential activities under the programme have been considerably expanded. The new TB cases' detection has been increasing from year to year. As against detection of about 10.81 lakh new T.B. cases during 1982-83, about 16.69 lakh new TB cases were detected during 1989-90. Further, to expand the TB case detection among the rural populace and involve the Primary Health Centres in TB case detection, targets were also laid for



conducting 50 sputum examinations per month at each of the Primary Health Centres for the first time during 1983-84, and nearly 12.12 lakh sputum examinations were conducted. There is a significant improvement in this activity and during 1989-90 about 25 lakh sputum examinations were conducted in the Primary Health Centres.

4.6.8 The targets for 1990-91 in respect of new TB case detection is 16.50 lakh and about 33.96 lakhs in respect of sputum examination of New Chest Symptomatics at the Primary Health Centres. During the period from April, 1990 to August, 1990 about 6.18 lakh new TB cases (provisional) have been detected by the States and Union Territories and nearly 8.42 lakh (provisional) sputum examinations were conducted at the Primary Health Centres.

4.7 BCG Vaccine Laboratory, Madras

4.7.1 BCG Vaccine laboratory, Madras, a Subordinate Office under the Directorate General of health Services was set up in 1948 with the assistance of the WHO and UNICEF to manufacture and supply BCG Vaccine and Tuberculin PPD to all the States and Union Territories of India. The supply of P.D. BCG Vaccine to States and Union Territories is done under the Expanded Programme on Immunisation and

Universal Immunisation Programme, as per allocations fixed by the Government of India. The biologicals are also supplied to Medical Institutions and Private Practitioners on payment. This is the only laboratory in India engaged in production of F.D. and Vaccine and Tuberculin PPD.

4.7.2 Post-graduate students from Madras University doing M.Sc. and M.D. Microbiology have been trained at this Laboratory.

4.7.3 *Future Plan of Action* : The expansion of the BCG Vaccine Laboratory included in the VII Five Year Plan with an outlay of Rupees one crore is exclusive of imported machinery costing about 1.2 million U.S. Dollars at the UN price. The machineries consisted of three ES/100 Automatic Ampoule Sealing Machines from Japan, one Industrial Type Freeze Drier and one Vaccum Descicator from France. The Ampoule Sealing Machines have been installed by Engineers from Japan. The air-conditioning and cabling work is in progress for the installation of the Industrial Type Freeze Drier. As soon as the work is completed, the Engineers from M/s Usifroid, France, who supplied the Freeze Drier will be intimated for the installation.

The biologicals produced and supplied during the period April, 1990 to December, 1990

	Production (In lakhs)		Supply (In lakhs)	
	Ampoules/ Vials	Doses	Ampoules/ Vials	Doses
<i>F.D. BCG Vaccine</i>				
20 doses per ampoule	7.84	156.89	16.50	330.01
<i>Tuberculin PPD</i>				
RT 23				
100 doses per Vial				
1 TU/dose	0.14	14.32	0.15	15.12
2 TU/dose	0.0022	0.22	0.0022	0.22



4.7.4 The production capacity will increase from the present installed capacity of 12 Lakh ampoules of 20/50 doses so as to fulfil the requirement of vaccines under the Expanded Programme on Immunisation and Universal Immunisation Programme.

### 4.8 National Programme For Control of Blindness

4.8.1 *Status of the Programme*: Magnitude of the problem of blindness in the country is discussed in the ensuing paragraphs.

4.8.2 The I.C.M.R. Survey in 1973-74 estimated about 9 million blind persons in the country (i.e. those who cannot see well at 6 metres). In addition, nearly 45 million persons were estimated to be suffering from visual impairment. As per the results of the recent National Survey and Evaluation Study on magnitude and causes of blindness conducted by Dr. Madan Mohan, Adviser(O) (1986-89) which was sponsored by the Ministry of Health and Family Welfare and W.H.O., about 12 million persons are blind in this country (blindness being defined as visual acuity of 6/60 in better eye). The main causes of blindness in India (as estimated by the 1986-89 survey) are: Cataract (81%), trachoma (0.20%, Corneal opacity (3%), Vitamin 'A' deficiency (0.04%) refractive errors (7%), glaucoma (2%) and others (7%).

4.8.3 *Plan of Action*: The National Programme for Control of Blindness was launched throughout the country by the Governemnt of India in 1976, with the ultimate aim to reduce the blindness in the country from 1.4% to 0.3% by 2000 A.D. To achive this aim, the programme is providing immediate relief to the needy by eye camp approach and by establishment of permanent eye care facilities with graded expertise at different levels coupled with health education measures.

4.8.4 *Cataract Operations*: Since cataract accounts for 81% of blindness, cataract operations are given top priority under the programme. Each year an average target of 12 lakh cataract operations is fixed for the country as a whole. The performance has been satisfactory. The cataract operations performed during the last five years are as under:—

Year	Target (lakhs)	Perfor- mance (lakhs)	Achive- ment %age
1985-86	13.84	12.18	88%
1986-87	13.83	11.76	87%
1987-88	12.25	11.93	97%
1988-89	12.25	11.85	95%
1989-90	12.84	10.84	82%
1990-91	12.84	—	—

The targets are allocated to the States/UTs at the rate of 2 per 1000 population.

4.8.5 *Development of Infrastructure*: The following infrastructure has been developed up to the end of the VII Plan:—

	Achivement up to end of VII Plan	Targets for 1990-91
Strengthening of PHCs	4200	250
Central Mobile Units	80	—
Strengthening of Distt. Hospitals	404	—
Upgradation of Department of Ophthalmology in Medi- cal Colleges	60	—
Establishment of Regional Institutes.	9	—
Ophthalmic Asstt. Training Schools	37	—
Setting up of State Oph- thalmic Cells	18	—
Setting up of Distt. Mobile Units	160	56
Eye banks in Government Sector and Voluntary Organizations.	107	11



4.8.6 *VIII Plan Proposals*: During the VIII Plan, an outlay of Rs. 445.56 crores has been proposed for the National Programme for Control of Blindness. This contains the component of Danish Financial Assistance which is available for the Programme under phase-II. The total Assistance for Phase II amounts to Rs. 22.24 crore for a period of 5 years (1989-93) for the following services under the Programme:

*Obligation of Government of Denmark*

	<i>Rs. in millions</i>
1. Equipment	38.68
2. Transport	62.80
3. Training in programme-related activities	27.54
4. Training in equipment maintenance	4.48
5. Additional input in upto 200 districts	14.00
6. Pilot districts	40.00
7. Monitoring System	14.73
Total	202.23
Contingencies @10%	20.22
Grand Total	222.45

4.8.7 *Monitoring System*: As per the recommendations of the Working Group on Control of Blindness endorsed by the High Powered Committee, 18 major States have been provided with Ophthalmic Cells under the Central Assistance. Besides meeting the cost of establishment of these cells, they have also been provided with a vehicle recently. The cells are engaged in monitoring the field activities of the National Programme for Control of Blindness. At the Central level, an Ophthalmology Cell functions under the Directorate General of Health Services.

4.8.8 *Data Information System*: A Management Information System has been proposed to support the National Prog-

ramme for Control of Blindness during Phase-II of the Danida Assistance to the Programme.

4.8.9 *New Ideas put into Force*: 9 States/UTs have been asked to establish District Blindness Control Societies to be registered under the Societies Registration Act XXI of 1860.

4.8.9 (a) These societies will function under the D.C./D.M. of the district for implementation of the National Programme for Control of Blindness by involving voluntary organizations in the area. The societies will be able to raise funds from local sources for the activities of the NPCB. Draft model bye-laws in this regard have been prepared and circulated to the States/UTs. Some districts have already registered the societies.

(b) Inclusion of 2-3 lectures on the National Programme for Control of Blindness has been introduced for I.A.S. Probationers to make them aware of the blindness problem and the N.P.C.B. so that they may utilise their knowledge when posted in the districts as Collectors and District Magistrates.

(c) Zonal Action Groups for South and North Zones have been constituted for interaction among the concerned States and for efficient implementation of the programme.

(d) Two Workshops on Formulation of State's Master Plans and formulation of Plans for 5 Pilot Districts were held between 17-20 September 1990 at New Delhi.

## 4.9 National Goitre Control Programme

4.9.1 Goitre, characterised by swelling of the thyroid gland in front of the neck, is one of the manifestations of Iodine Deficiency in the body. In addition to Goitre, Iodine deficiency can affect physical growth and mental development at each and every stage of life.



4.9.2 Iodine deficiency was earlier believed to be confined to sub-Himalayan regions of the country. However, surveys conducted by the Goitre Cell of the Directorate General of Health Services and other agencies have now revealed that it is prevalent in practically all States and UTs.

4.9.3 Wherever surveys to estimate the prevalence of Iodine Deficiency Disorders have been carried out, results have demonstrated that it exists as a major public health problem in these areas. In all, 204 districts were surveyed in various States of the country and 182 were found to be endemic for Iodine Deficiency Disorders. Similarly, IDD's were prevalent in Union Territories to the tune of 45.9% in Chandigarh, 22.7% in Dadra and Nagar Haveli; 12.2% in Daman and Diu; and 29.0% in Delhi. A & N Islands, Lakshadweep and Pondichery were not surveyed.

4.9.4 In the 1984 meeting of the Central Council of Health, a decision was taken to Iodise the entire edible salt in the country. The programme of Universal Iodisation of salt commenced from 1st April 1986 in a phased manner. The Government of India stands committed to Universal Iodisation of all edible salt by 1992 and the estimated annual requirements will be 50.00 lakh MT.

4.9.5 The Salt Commission has been issuing permission to set up Iodisation units to meet the growing demands. As of 31st December 1989, 368 units with a production capacity of 33 lakh MTs. have already gone into production.

4.9.6 It has been decided that the normal trade channel can continue for distribution of iodised salt, the only difference being that instead of producing common salt, nominees or the traders will procure iodised salt from iodized salt manufacturers. A quantity of 22.57 lakh MTs. of iodised salt was distributed to the goitre endemic States/UTs. from April 89 to March 90 by both Private and Public

Sectors. A target of 40.00 lakh MTs. has been fixed for 1990-91.

4.9.7 The sale of non-Iodised salt has been completely banned in 18 States/UTs and partially in 6 States. These are completely banned in Arunachal Pradesh, Assam, Bihar, Chandigarh, Delhi, Dadra & Nagar Haveli, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Manipur, Mizoram, Meghalaya, Nagaland, Punjab, Sikkim, Tripura and Uttar Pradesh. These are partially banned in Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Orissa and West Bengal.

4.9.8 17 States and 3 UTs have established Goitre Control Cells in their State Health Directorates for effective monitoring and proper implementation of National Goitre Control Programme, for which cash grant is being provided by the Central Government.

4.9.9 A communication package has been executed by the Ministry with UNICEF for intensification of information, education and communication (IEC) activities in States/UTs. To begin with, the States of Uttar Pradesh, Himachal Pradesh, Madhya Pradesh, Bihar and the U.T. of Delhi have been covered.

4.9.10 Apart from this, the States/UTs are also being provided assistance under the National Goitre Control Programme for carrying out health education activities on Iodine Deficiency Disorders as well as for undertaking surveys.

4.9.11 *Subsidy* : To encourage production of iodised salt, the Government of India is providing subsidies to iodised salt manufacturers @ Rs. 20/- per M.T.

4.9.12 *Budget* : During 1990-91 a budget provision of Rs. 450.00 lakhs has been made under the National Goitre Control Programme.



#### 4.10 National Sexually Transmitted Diseases Control Programme

4.10.1 The National Sexually Transmitted Diseases Control Programme operates as a purely Central sector health scheme with 100% Central assistance during the Eighth Five Year Plan. The main components of the scheme, viz. Teaching and Training, Research, Epidemiology and Health and Community Education, are implemented by the Regional STD Teaching-cum-Training Centres, Regional STD Reference Laboratories and Regional Survey-cum-Mobile STD Units established during the Sixth Plan period at Calcutta, Delhi, Hyderabad, Madras and Nagpur. The functional responsibilities of these Regional STD Centres / Laboratories / Survey Units are:

- (a) Conducting orientation courses for the in-service medical and para-medical personnel in the case detection and management aspects of STDs for a period of one month round the year. The medical officers and para-medical personnel are paid stipends by the Government of India @ Rs. 800/- p.m. and Rs. 620/- p.m. respectively.
- (b) Conducting orientation courses for the laboratory personnel in the laboratory management of the disease, conducting inter-laboratory evaluation & standardisation of VDRL test and Research Work in the laboratory diagnosis of STDs.
- (c) Conducting survey work and organising camps in the city slums, red light areas, educational centres/institutions, industrial areas/belts, tourist spots, backward and tribal areas, to know the epidemiology of the disease and provide immediate therapy to the patients suffering from STDs.

4.10.2 *Budget* : During the current financial year Rs. 30.00 lakh has been provided under the programme. The funds are released to the State Governments of Andhra Pradesh, Maharashtra, Tamil Nadu, West Bengal and to 2 Central Institutions, viz. Serologist & Chemical Examiner to the Government of India, Calcutta, Central Health Education Bureau, New Delhi, and Safdarjang Hospital, New Delhi, for implementation of the activities.

4.10.3 *Achievements* : The achievements made so far under the programme are as under:—

(a) Medical Officers trained	... 76
(b) Para - Medical personnel trained	... 93
(c) No. of District Hospitals participating in inter-laboratory evaluation	... 5
(d) Camps organised and population screened	42
	camps, about 10,000 persons screened.

#### 4.11 National AIDS Control Programme

4.11.1 In India, the National AIDS Control Programme was established in 1985 with the collaboration of I.C.M.R. It has three major components i.e. (i) surveillance; (ii) health education and information; and (iii) screening of blood and blood products. The National AIDS Control Programme has established 45 surveillance centres in different parts of the country and 4 referral centres. The purpose of conducting the screening programme was: (i) to understand the mode of transmission of the disease in different parts of the country; (ii) to assess the status of HIV infection and its distribution within selected populations; and (iii) monitor changes in prevalence of HIV infection in selected groups.



4.11.2 Under the programme, the Indian Council of Medical Research has established 28 exclusive zonal blood testing centres in the metropolitan cities of Bombay, Calcutta, Delhi and Madras to test the blood donors by establishing linkage with the blood banks.

4.11.3 For efficient clinical management of HIV infected persons and AIDS cases, facilities have been developed at 10 medical colleges of the country at present.

4.11.4 The Government of India in collaboration with the WHO has so far organised 14 training courses for physicians and nurses in the clinical management of AIDS cases in different parts of the country. The medical officers so far trained include 280 doctors and 140 nurses.

4.11.5 The Central Health Education Bureau of the Directorate General of Health Services has developed health and publicity material for information of the general public. 36 hoardings have been developed and displayed in 16 States. Printed materials (posters and folders) were prepared and sent to all the medical college hospitals. State Health Directorates, National Council for Education Research and Training (N.C.E.R.T.), Jails, Police Departments, Universities and to the public. 100 bus panels were developed and installed for a period of 6 months in the local and Inter-State buses covering the States of Uttar Pradesh, Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh and Rajasthan. 100 kiosks were put up in and around Delhi University for a period of 12 months. 144 cinema slides were released in 77 cinema halls in Delhi.

4.11.6 As of 30.11.90, through a network of 45 surveillance centres and 4 referral centres, 586182 people belonging to high risk groups namely, prostitutes, patients

attending STD clinics, blood donors, recipients of blood and blood products and foreigners have been screened, and out of them 4134 have been detected sero-positive. The sero positivity rate per thousand is 7.0.

#### **4.12 National Mental Health Programme**

4.12.1 The Government of India decided to launch the National Mental Health Programme during the 7th Five Year Plan period to ensure availability and accessibility of minimum mental health care for all in the foreseeable future, particularly to the most vulnerable and under privileged sections of the population, to encourage application of mental health knowledge in general health care and social development, and to promote community participation in the mental health service development and stimulate efforts towards self help in the community.

4.12.2 A National Advisory Group on Mental Health has been constituted under the Chairmanship of the Secretary, Ministry of Health and Family Welfare for the effective implementation of the National Mental Health Programme.

4.12.3 A provision of Rs. 25.00 lakh has been made for implementation of this Scheme during this year. Eleven Institutions have been identified for imparting training to health personnel under the programme.

4.12.4 These 11 colleges will be providing training in basic knowledge and skills in the field of Mental Health to the Primary Health Care physicians and paramedical personnel. These Centres will also coordinate the various Mental Health activities in the region and supply the health education materials to the other training centres in their respective regions and coordinate with the Ministry of Health and Family Welfare. The Central assistance for implementing this



component of the programme shall be as under :

<i>A Staff</i>	<i>No. of posts</i>	<i>Annual Financial implication</i>
(i) Clinical Psychologist	1	Rs. 50,000/-
(ii) Psychiatric Social Work	1	Rs. 50,000/-
(iii) Occupational Therapist	2	Rs. 50,000/-
B TA/DA for staff and Trainees.		Rs. 20,000/-
C Contingency.		Rs. 10,000/-
D Expenditure per Institution (Recurring); Rs. 1.80 lakh		1,80,000/-
For 11 Institutions.		Rs. 19.80 lakhs

### 4.13 National Diabetes Control Programme

4.13.1 The National Diabetes Control Programme was included in the 7th Five Year Plan as one of the Central Health Sector Programmes and was allocated a sum of Rs. 25 lakh to initiate District Diabetes Control Programmes. With this object in view, it was recommended that the infrastructure for monitoring and evaluation at the national level be created during 1986-87 with identification of districts and initiation of exploratory contacts with the State-level health functionaries so as to implement programmes at the district level. The Programme as developed in Tamil Nadu and Jammu & Kashmir, has provided a model for integration of diabetes care and control in the primary health care programme.

4.13.2 Objectives of the Programme are: (a) Identification of high risk subjects at early stages and imparting appropriate health education with focus on primary prevention of diabetes; (b) Early diagnosis of the disease and institution of appropriate management so as to reduce morbidity and mortality (secondary prevention) with emphasis on vulnerable groups e.g. gestational diabetes.; (c) Prevention, arrest or slowing of acute metabolic as well as

chronic cardio-vascular-renal complications of the disease; (d) Provision of equal opportunities to ensure scholastic achievements as well as physical attainment and thus ensuring social and emotional adaptation leading to an improved quality of life; and (e) Identification of those with partial or total physical handicaps owing to disease to ensure their rehabilitation with emphasis on optimal organ or body function.

4.13.3 *District Diabetes Control Programme:* (i) *Tamil Nadu:* The Programme has been implemented in two districts e.g. Salem and South Arcot. These districts were chosen, as the primary health care services here had already been strengthened through the development of essential infrastructure and key inter-linkages with referral and monitoring mechanisms. Clinical and laboratory facilities at 69 community health centres are now functioning satisfactorily, with provision of glucometers at each of the community health centres and some of the primary health centres too.

4.13.3 (ii) A well-structured health manpower development programme has been launched with the achievement of targets as shown in the table given on page 44. Learning resource materials prepared by the National Coordinator under the title 'Full Life Despite Diabetes' have been translated into Tamil with appropriate adaptations to convey meaningful messages to the community and to primary health care personnel who work with the community in Salem and South Arcot Districts. In addition, a manual for the training of laboratory assistants has been prepared. The manual provides comprehensive coverage to all laboratory procedures in the setting up of primary health care, with major emphasis on such procedures as are useful for the diabetes health care and control programme.

4.13.4 *Jammu and Kashmir—Background Information:* Since 1975 major efforts have been made in Jammu and Kashmir to develop meaningful



programmes of primary health care based on involvement of primary school teachers as first contact health care functionaries in rural areas. The school teachers so trained are called Rehbar-i-Sehat and the historical background of conceptualisation, planning, production, management and evaluation of the Rehbar-i-Sehat programme in Jammu and Kashmir is available.

4.13.4 (i) A decision to integrate diabetes care into the primary health care programme was taken in 1980 and workshops as well as training programmes were conducted during 1980-83. It was, therefore, appropriate to select District Jammu as a target of the National Diabetes Control Programme.

4.13.4 (ii) *Programme Implementation:* The major focus in the programme implementation in Jammu is on the care and control of diabetes in pregnant women. The programme has been developed at two sub-district hospitals located at Samba and Akhnoor and the Primary Health Centre located at Bishnah. The total population covered is 3.54 lakh. There are 54 Sub-centres and 9 allopathic dispensaries in the area, which are included in the programme.

4.13.4 (iii) Laboratory services have been strengthened and criteria for diagnosis of gestational diabetes have been standardized. A study of 565 glucose tolerance tests in 410 consecutive pregnant women was carried out. An additional sub-group was further investigated. On the basis of the study, it has been recommended that all high risk pregnancies should be screened through a capillary blood glucose test, drawn one hour following administration of 50 gm. glucose. All those with blood glucose 160 mg/dl. should be

subjected to glucose tolerance test, using 75 gm. glucose as the test load.

4.13.4 (iv) Health Manpower Training courses for imparting instruction and education to laboratory technicians have been conducted in addition to the education and training of other paramedical staff including Rehbar-i-Sehat personnel. Learning resource materials have been prepared in Hindi and Urdu translations of 'Full Life Despite Diabetes' prepared by the National Coordinator, have been printed and published for free distribution amongst all primary health care personnel.

4.13.5 *Future Developments:* A Steering Committee has been constituted, which meets annually to review the progress during the 8th Five Year Plan. The Committee has recommended that a National Diabetes Documentation Centre should be established in conjunction with the Coordination and Monitoring Centre located at the AIIMs., New Delhi. The National Diabetes Documentation Centre will collate and distribute all available information on the prevalence, management and control of diabetes mellitus. A study on the prevalence of diabetic retinopathy has been planned, and the research protocol and proforma prepared for a multi-national study to assess the magnitude of the problem and the impairment of vision through diabetes mellitus. A survey is also being undertaken to investigate various methods of nutrition therapy for diabetes in the medical institutions in the country, and to standardize and evolve national guidelines for imparting education for diet therapy, especially for the semi-literate and illiterate belonging to the poor socio-economic strata. The programme will be extended to additional districts in other States during the 8th Five Year Plan.



## Statement

### Education and Training of Diabetes Health Care Providers

Ref. para 4.13.3. (ii)

<i>Locale</i>	<i>Category of Health Care Providers</i>	<i>Skills Imparted</i>	<i>Time Duration of Educational Courses</i>	<i>Total No. of Courses</i>	<i>Total No. of Trainees</i>
1	2	3	4	5	6
Health Sub-Centre	i) Multi-purpose health worker (F) ii) Health Supervisor (F)	Urine for analysis for Glucose and Proteins	10 days course on MCH care of which 1 day was on urine analysis for Glucose and Proteins.	170	1758
Community Health Centre (Block Level PHC)	i) Laboratory Assistants	a) Urine for analysis for Glucose and proteins	a) 30 days course on all laboratory tests, of which 5 days are on urine tests for glucose and proteins. Blood sugar estimation.	6	69
		b) Blood Sugar estimation.	b) 2 days of Refresher Training on Blood Sugar Estimation; GTT	2	69
		c) Glucose Tolerance Test.			
	ii) Medical Officers	Care and Control of Diabetes Mellitus	2 days Refresher Course on		
			a) Clinical aspects of Diabetes	7	210
			b) Use of Laboratory data and management of diabetes.		
			c) The goals and objectives of District Diabetes Control Programme.		

#### 4.14 Oral Rehydration Therapy Programme

4.14.1 Diarrhoeal diseases are a major health problem in the country especially among children below five years of age. Diarrhoea accounts for roughly 25% of the mortality in children under five. Field investigations suggest an estimate of 1.5 million deaths from diarrhoeal diseases. On an average, a child suffers from three episodes of diarrhoea per year. The programme was launched during the 7th Five Year Plan with an outlay of Rs. 25 crore.

Year-wise allocation made to the States/UTs so far is as under:—

1986-87	Rs. 116.00 lakh
1987-88	Rs. 423.89 lakh
1988-89	Rs. 463.53 lakh
1989-90	Rs. 517.18 lakh
1990-91	Rs. 790.00 lakh

4.14.2 The main components of the programme are: i) Training of the medical and para-medical personnel at all levels; ii) Extensive Health Education of the



population especially the mothers; iii) Augmenting the supply of ORS in the Public Health Care System; iv) Augmentation of staff and mobility; and v) Monitoring & evaluation.

4.14.3 Thrust areas of the programme are: (a) Setting up of diarrhoeal training-cum-treatment units at Medical Colleges for improving case management. 21 Diarrhoeal Training Treatment Units have been sanctioned; and (b) Improving Home management of diarrhoea by intensive education of communities especially mothers.

4.14.4 Health Education Material prepared:

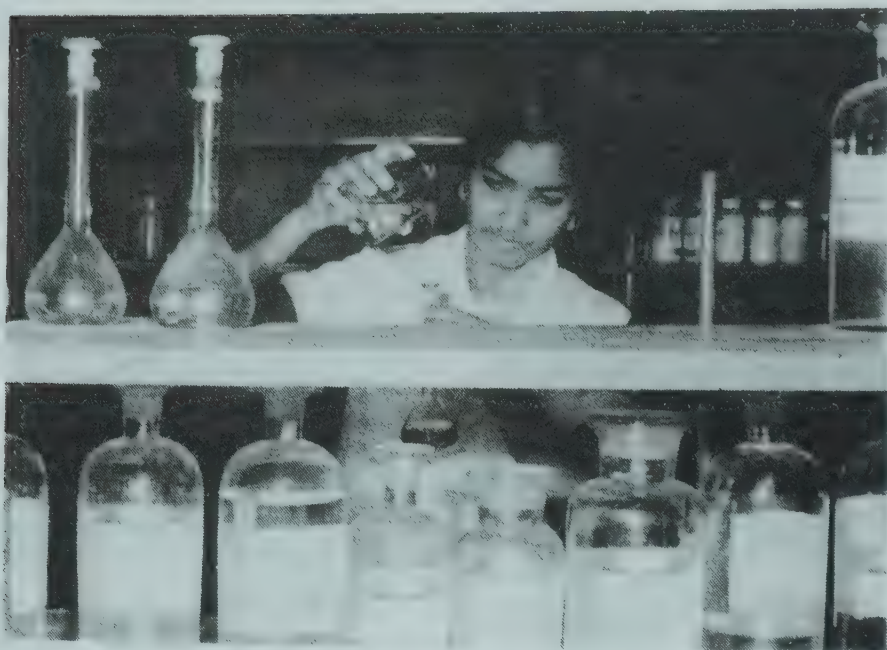
- for training of Health providers and Community
- training modules for doctors and Health Workers.
- Audio-visual training modules, long and condensed versions;
- Audio-visual training cassettes for doctors—"340 million Children" (views of eminent doctors on management of diarrhoea).
- Diarrhoea, a "simple solution" advocacy film for policy makers, politicians.
- Five short films on various aspects of diarrhoeal management and screening at movie theatres.
- Radio jingles
- Set of five posters, pamphlets and special issue of "*Centre Calling*" and "*Hamara Ghar*" on Diarrhoea.

4.14.5 Activities to be undertaken during 8th Five Year Plan are:

- Intensification of the training activities to cover all medical and para-medical workers at all levels in the Government i.e. clearing up the backlog of the 7th Plan period and retraining programmes for others.
- To expand the setting up of diarrhoeal training units at medical colleges in a phased manner by taking up 20-30 medical colleges.
- To strengthen the case management of diarrhoeal diseases at district level hospitals by setting up small diarrhoeal training units in a phased manner in the districts.
- To arrange mothers' meetings all over the country by using a training kit with audio-visual aids to improve the household management of diarrhoeal diseases.
- To strengthen IEC activities specially the use of radio, television and other communication channels for community awareness.
- To introduce the concept of social marketing of Oral Rehydration Salt to meet the needs of the communities.
- Marginal strengthening of the Central Headquarters and States to monitor the expanding programme of Oral Rehydration Therapy.
- To undertake operational research, bio-medical research and Epidemiology.
- Involvement of health related sectors and practitioners of medicine other than allopathic medicine will also be sought in diarrhoeal diseases eradication programmes.



## PREVENTION OF ADULTERATION OF FOOD AND DRUGS



**A**dulteration of Food and Drugs is assuming menacing proportions with the technological advancements. This harmful and anti-social practice poses a serious threat to the health of the people. Countrywide efforts are, therefore, being made for curbing this practice. Over the years, the punishment for violation of certain provisions of the Food Adulteration Act have been made more stringent, even entailing life-term imprisonment in cases of adulteration which could amount to causing serious harm to the consumer.

### 5.2 Prevention of Food Adulteration Act & Rules

5.2.1 Food is the basic need for survival. In a country like ours where about 37% live below the poverty line, it is imperative to ensure that whatever we consume is pure and wholesome. With this objec-

tive, the Parliament has enacted the Prevention of Food Adulteration Act, in the year 1954. The aims envisaged under this Act are summarised as:—

- i) To ensure quality food to the consumers;
- ii) To protect the consumers from fraud or deception;
- iii) To encourage fair trade practices.

5.2.2 The Act, which came into effect from 1st June, 1955 was amended thrice—1st in 1964, secondly in 1976 and lately in 1986, for plugging the loopholes and for making the punishment more stringent. It was by the amendment of 1976 that punishment for adulteration which could cause such harm so as to amount to grievous hurt within the



meaning of Section 320 of I.P.C., punishment of imprisonment for a term of which shall not be less than 3 years but which may extend to term of life with fine which shall not be less than Rs. 5000/-, was included. With the amendment in 1986, the consumer and voluntary organisations have been empowered under the Act to take samples of food and initiate legal action whenever necessary.

5.2.3 Under the Prevention of Food Adulteration Act, 1954 the definition for the term "Adulterated" and "Misbranded" have been included. "Food" has been defined as any article which ordinarily enters into or is used in preparation of human food, any flavouring matter and condiments and any other article which the Central Government having regard to its use, nature, substance or quality declared by notification in the Official Gazette as food for the purpose of this Act.

5.2.4 Under the powers conferred on the Central Government by the Act, the Central Government has notified Prevention of Food Adulteration Rules, 1955. The Rules cover besides standards for the various food products, regulations with regard to addition of colouring matters, addition of flavouring matters, rules with regard to packaging and labelling of foods, prohibition and regulation of sales, addition of preservatives, presence of poisonous matters, addition of anti-oxidants, emulsifying and stabilising and anti-caking agents, standards and regulations for solvent extracted oils and edible oils and licensing conditions.

5.2.5 The implementation of the Act by and large rests with local bodies. The States of Andhra Pradesh, Gujarat, J&K, Madhya Pradesh, Maharashtra, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal and the Union Territory of Delhi have established separate Directorates for Food & Drug Administration/Cell for

enforcing the provisions of the Act. Besides regulating the provisions with regard to licensing conditions vis-a-vis hygienic and sanitary requirements, the quality of food in the country is monitored by the States/Union Territories by drawing samples of different foods regularly. As adulteration may take place at any stage, may it be manufacturers, wholesalers or retailers, the State Governments have been requested from time to time to keep a strict vigil on the quality of food which may find its way into the market through any of the outlets.

### 5.3 Central Committee for Food Standards (CCFS)

5.3.1 A Committee known as the Central Committee for Food Standards, a statutory committee under the provision of Prevention of Food Adulteration Act, 1954, has been constituted to advise the Government on matters arising out of implementation of the P.F.A. Act. The Committee has constituted 9 Technical Sub-committees/Panel for reviewing the various provisions of the P.F.A. Rules, revising of the standards of food articles and laying down standards for new food items.

5.3.2 *Objectives of the Programme:* The broad objectives of the programme are:—

- (i) To ensure availability of pure and wholesome food of right quality to consumers to meet their nutritional and basic food needs;
- (ii) To organise regular training courses for the officials of State/U.Ts.;
- (iii) To assist State Govts./U.Ts. in strengthening of Food Testing Laboratories;
- (iv) To protect the consumers from fraudulent trade practices;
- (v) To promote consumer awareness and educate them in the sphere of consumer protection, food hy-



giene, food safety, labelling provisions, food additives etc. through exhibitions, T.V., pamphlets, etc.;

- (vi) To provide extension services to trade;
- (vii) To monitor and evaluate P.F.A. implementation activities throughout the country.

5.3.3 *Current Status:* Apart from the State Government's liabilities, the Central Government has to perform a major role in the implementation of this Act. There is one P.F.A. Unit in the Dte. General of Health Services, which is responsible for the following work:—

- (i) Constant review of P.F.A. Rules and standards of food products on the basis of technical data collected from different parts of the country;
- (ii) To coordinate with the Codex Alimentarius Commission in finalising standards for food for international trade and to represent national view point on the international forum, i.e., in the meetings of The Codex Alimentarius Commission and its subsidiary bodies;
- (iii) To liaise with the different bodies and the Departments—National and International level—dealing with Food Standards and Food Safety Programme;
- (iv) To guide the States/U.Ts. on technical/legal matters;
- (v) Exercising check on quality of food imported in the country;
- (vi) Coordinate and liaise with States/U.Ts. on matters relating to the implementation of the P.F.A. Act in the country;
- (vii) Constant monitoring, evaluation and research;
- (viii) Training of various functionaries under the P.F.A. Act and training to food handlers;
- (ix) Guidance to the trade, industry to

follow the provisions of the P.F.A. Act. 1954;

- (x) Extension service and guidance to the consumer organisations on the provisions of the P.F.A. Act and Rules through meetings, conferences, publicity and seminars;
- (xi) To carry out research/survey to find out the extent of adulteration/contamination in different commodities of food article in the country and amend/review the standards of food articles from time to time.

5.3.4 *Achievement:*

- (a) Since 1954 the provision of the Act has been amended thrice (1964, 1976 and 1986) with the objective of making the punishment more stringent and giving powers to the consumers/voluntary organisations to actively associate themselves in matters of enforcement of food laws;
- (b) Standards for nearly 200 articles of food including food additives have been laid down;
- (c) 25 Training programmes have been arranged for senior level officers/public analysts/food inspectors working in the States/U.Ts. and more than 400 officials have been benefitted by these training programmes;
- (d) A total of 9 examinations have been conducted for the chemists working in the States/U.Ts. and 180 officials have been declared qualified to hold the post of public analyst;
- (e) A National Conference on Food, Quality Assurance and Consumers Participation was arranged in the year 1988 for the purpose of inviting suggestions from the consumer organisations for effective implementation of the P.F.A. Act;
- (f) A National Workshop on Food Safety in Public Catering has been



organised in 1989 which highlighted the need to offer Orientation Training Programme/Continuous Education Programme and Food Safety Certificate Courses for food handlers, managements and staff of Public Catering Establishments;

- (g) A W.H.O.-sponsored workshop on Health Legislation was held at Hyderabad on 28th and 29th of April, 1990 under the auspices of the University of Andhra Pradesh. The Workshop considered various aspects relating to administration of the Prevention of Food Adulteration Act in the country and suggested measures at the Central/State/Local bodies level for improving the programme of Food Safety and Quality;
- (h) An Expert Group meeting on Food Additives was organised at the Central Food Technological Research Institute, Mysore in March, 1990;
- (i) The P.F.A. Cell participated in three international exhibitions on Food Expo organised by the Trade Fair Authority of India where educational materials were distributed to the public and simple methods of detection of adulterants in food were also demonstrated;
- (j) A number of publicity materials on Food Safety and Quality Control have been brought out. These have been distributed free of cost to the States and Consumer Organisations. A kit for detection of adulterants which could be used by housewives, have been developed and a few of these kits were distributed free of cost to the consumer organisations;
- (k) The Central Committee for Food Standards held its meeting in June, 1990 and made a number of recommendations relating to amendment to

the provisions of the Rules and Standards.

## 5.4 Laboratory Facilities

5.4.1 *Central Food Laboratories:* Under the provisions of this Act, Central Food Laboratories are established which are working as appellate laboratories for the purpose of samples lifted by food inspectors of States/U.Ts. and local bodies. At present, we have two laboratories under the administrative control of the Directorate General of Health Services, viz., Central Food Laboratory, Calcutta and Food Research & Standardisation Laboratory, Ghaziabad, which are moderately equipped. Two more laboratories—one at Pune and another at Mysore—are also declared as Central Food Laboratories under the Act. The Pune Laboratory is that of the Government of Maharashtra and the Mysore laboratory is of the Council of Scientific and Industrial Research, Government of India.

5.4.2 The laboratories of Mysore and Pune are receiving grant-in-aid from the Directorate @ Rs. 4 lakh per year for doing work under the prevention of Food Adulteration Act.

## 5.5 State Food Laboratories

5.5.1 In addition to that, there are 76 food laboratories under the administrative control of the State/Local Bodies. Out of these, 63 are managed by State Governments and the remaining 13 by the Local Bodies. The State laboratories are moderately equipped whereas regional/local bodies laboratories need to be equipped. Equipments are being provided to some of the Laboratories out of W.H.O. fund.

5.5.2 A statement outlining working of the Prevention of Food Adulteration Act in the country during the period 1981-89 is given at the end of this chapter.



## 5.6 Central Drugs Standard Control Organisation

5.6.1 The main functions of the Central Drugs Standard Control Organisation are:—

- (i) To control the Quality of drugs imported into the country.
- (ii) To coordinate the activities of the States and to advise on uniform administration of the Act in the country.
- (iii) Approve 'New Drugs' proposed to be imported into or manufactured in the country.

5.6.2 *Quality Control over Imported Drugs:* The statutory control over the drugs imported into the country is exercised by the various Port and Airport Offices of the Central Drugs Standard Control Organisation located at Bombay, Navasheva, Calcutta, Madras, Cochin and Delhi.

5.6.2 (i) During the period from April to October, 1990, the value of imported bulk drugs, drug intermediates, finished formulations and chemical solvents etc. was Rs. 364.81 crore and export during this period was upto Rs. 417.46 crore approximately.

5.6.2 (ii) 3175 samples were sent for test out of which 21 samples were found to be not of standard quality. The Customs authorities were advised to take suitable action under the law in respect of sub-standard drugs found to have non-remediable defects.

5.6.3 *Co-ordination and Liaison with the States:* Four Zonal Offices located at Bombay, Calcutta, Madras and Ghaziabad coordinate with the State Drugs Control Authorities under their jurisdiction, for a Uniform standard of inspection and enforcement of the Drugs Rules.

5.6.3 (i) The Zonal Officers inspected,

either jointly with State Drugs Control Authorities, or independently, 285 manufacturing firms, 141 blood banks and 11 approved laboratories.

5.6.3 (ii) The State Drugs Control Authorities were informed of the deficiencies observed during these inspections.

5.6.4 *Approval of New Drugs:* Voluminous literature in relation to pharmaceutical information, pharmacology, pharmacodynamic, pharmacokinetic studies, acute and long-term toxicity studies in different species of animals, special toxicity studies including reproductive studies, mutagenicity and carcinogenicity, clinical trial reports on new drugs for safety and efficacy of a new drugs molecule are examined before considering grant of permission for clinical trials of new drugs in India. The clinical trial reports conducted in India are examined including the bioavailability studies to establish bioequivalence of different brands of a new drugs before granting marketing approval. The approval of new drugs includes examination of package insert, promotional literature, the label claims, etc. and also testing of bulk drugs at the Central Drugs Laboratory, Calcutta. Permission to import 16 new Drugs under Rule 122-A and 17 new Drug formulations under Rule 122-B/122-C was granted for manufacture during the period April to October, 1990. During this period, 37 new applications were received for grant of approval under Rule 122-A and 29 applications were received for grant of approval under Rule 122-B/122-C.

5.6.5 *Central Drugs Laboratory, Calcutta:* The main function of this Laboratory is to test samples of imported drugs, to act as appellate laboratory under the Drugs and Cosmetics Act & Rules and as Govt. Analyst for 21 States/U.Ts. and as well as for samples drawn by the Central Drug Inspectors. This Laboratory also supplies reference standards of various drugs to Drug Manufacturers.



5.6.5 (i) 1578 Samples were tested and 221 samples were found to be not of standard quality during the period April to October, 1990. During this period, 495 samples were received under the National Survey on Quality of Essential Drugs Programmes, 433 samples were tested and 6 samples out of these were found sub-standard. 10 New methods of Analysis of New Drugs were evolved.

5.6.5 (ii) During this period; two Training Programmes were conducted in Advanced Techniques of Analysis of Drugs in which 12 trainees participated.

5.6.6 *Central Indian Pharmacopoeia Laboratory, Ghaziabad:* This is the statutory appellate laboratory for testing of Drugs as well as functions as Government Analyst for eight States/U.Ts. in addition to testing of samples on behalf of Central Government Departments. The experimental work relating to the standards for drugs included in the Indian pharmacopoeia is also carried out in this laboratory. During the period April to October, 1990, 1370 samples were tested by the laboratory and 233 samples were found to be not of standard quality.

5.6.7 *Biological Laboratory and Animal House, Madras:* This laboratory is testing the drug samples received from Drugs Inspectors of the Central Drugs Standard Control Organisation, South Zone and Medical Store Depot, Madras.

5.6.7 (i) 891 Samples were tested during the period April to October, 1990. Out of this, 65 samples were found not of standard quality.

5.6.8 *Drugs Consultative Committee:* Representatives of the Central and State Governments are the members of this Statutory Committee. It advises Central and State Drugs Controllers on matters relating to uniformity in the administration of the Drugs and Cosmetics Act and Rules thereunder.

5.6.9. *Weeding out of Irrational Combinations:* The examination of formulations including combination of drugs which have been licensed by the State Licensing Authorities and moving in the market is a continuous process. This is conducted by a Sub-committee of experts constituted by the Drugs Consultative Committee, a statutory body under the Drugs and Cosmetics Act. As per the decision of the Courts of Law, hearing is required to be granted to the affected manufacturers and based on the examination and the hearing, recommendations for weeding out a formulation is given by the Sub-committee to the Drugs Consultative Committee which in turn places its views to the Drugs Technical Advisory Board, a statutory technical body under the Drugs and Cosmetics Act. Based on the recommendations of the Drugs Technical Advisory Board, the formulations which are considered ineffective or harmful or irrational in the context of the present knowledge is weeded out through notification. So far, 27 categories of formulations have been prohibited for manufacture and sale through various notifications.

5.6.9(i) One meeting of Sub-committee of Drugs Consultative Committee was held in May, 1990, to examine rationality of the formulations.

5.6.10 *Drugs Technical Advisory Board:* This is a Statutory Board under the Drugs and Cosmetics Act to advise Central and State Governments on technical matters arising out of the administration of the Act. The meeting of the Board was held on 9th March, 1990. In this meeting some proposals for the amendment of Drugs and Cosmetics Rules were considered.

5.6.10 (i) The following important proposals were considered, by the Board.

- i) The draft amendment relating to special provisions of Tooth Paste containing flouride.
- ii) Draft amendment to notify M/s. Pasteur Institute of India, Coonoor



and the Enterovirus Research Centre, Bombay, for carrying out testing of Oral Polio Vaccine.

- iii) Draft amendment regarding testing of Blood for HIV anti-bodies.
- iv) Standardisation of packing of Drugs.
- v) Weeding out of harmful/irrational/ineffective fixed dose combinations.
- vi) To Ban Chloral Hydrate as Drug.
- vii) To declare the Homoeopathic Laboratory, Ghaziabad as a Laboratory under the provisions of Drugs and Cosmetics Rules.
- viii) Necessary standards to control the quality of intraocular lens.
- ix) Streamlining the cough syrup formulations.

**5.6.11 Indian Pharmacopoeia Committee:** During the period, one meeting of the Workshop Group of the Indian Pharmacopoeia Committee was held in which 64 new draft monographs on drugs including dosage forms earlier circulated for comments were finalised and the specifications for three drugs already included in the Pharmacopoeia were revised. The appendices relating to certain new techniques such as HPLC were also finalised. The list of amendments to the Indian Pharmacopoeia Third Edition and its First Addendum were discussed and finalised.

5.6.11 (i) The National Formulary of India, Third Edition, 1979, has been got translated into Hindi from the Commission for Scientific and Technical Terminology and has been sent for printing.

5.6.11 (ii) The 3rd Edition of the Indian Pharmacopoeia have been sold out and steps have been taken to get 5,000 copies of the Pharmacopoeia reprinted in view of its demand.

5.6.11 (iii) Steps have been taken to get the Pharmacopoeia of India and its Supplement translated into Hindi.

**5.6.12 Training Programme for Drugs Inspectors:** The Central Drugs Standard Control Organisation has been conducting Training Programme to their Drugs Inspectors. So far, 534 Drugs Inspectors of various States/U.Ts. have been trained under the Programme.

## **5.7 Drug De-addiction Programme**

**5.7.1** The Directorate General of Health Services in the Ministry of Health and Family Welfare is basically responsible for providing treatment facilities for the drug abuse problem so as to ensure that the patients are not deprived of required medical facilities.

5.7.1 (i) The expert committee on drug de-addiction was appointed by the Government of India to draw up a plan for implementation of health services in the area of drug dependence keeping in view the provisions of the 'Narcotics Drugs and Psychotropic Substances Act'.

5.7.1 (ii) In view of the growing problem of drug abuse, steps taken to set up Drug De-addiction Treatment Centres are discussed below.

**5.7.2 Delhi:** A model 30-bedded de-addiction unit became operational on 15th June, 1988 at the Deen Dayal Upadhaya Hospital, Hari Nagar, New Delhi, under the aegis of All India Institute of Medical Sciences. From January to September, 1990, 2454 persons were attended to in the OPD and 410 persons were hospitalised. The opiates constitute the majority.

**5.7.3 Additional De-addiction Units:** On the recommendations of Expert Committee it was decided to set up seven drug De-addiction Centres in government hospitals, namely (1) All India Institute of Medical Sciences, New Delhi, (2) Safdarjung Hospital, New Delhi, (3) Dr. Ram Manohar Lohia Hospital, New Delhi, (4) Smt. Sucheta Kriplani Hospital, New Delhi, (5) Guru Teg Bahadur Hospital, Shahdara, Delhi, (6) Post-graduate



Institute for Medical Education and Research, Chandigarh and (7) Jawaharlal Institute for Post-graduate Medical Education and Research, Pondicherry.

5.7.3 (i) Funds were released to PGI, Chandigarh, AIIMS and S.J. Hospital; New Delhi. However, it was noted that S.J. Hospital could not operate in-patient services and it was decided to shift the Centre to Smt. S.K. Hospital. G.T.B. Hospital has expressed its inability to set up a Drug De-addiction Centre. Besides there is a proposal to set up Drug De-addiction Centres in Manipur, Patiala, NIMHANS, Bangalore and North Delhi. During 1990-91; a sum of Rs. 218 lakh have been provided under the budget for the Drug De-addiction Programme.

5.7.4 *Allocation of Beds in Delhi Hospitals:* The Following allocation of beds in Delhi Hospitals has been made for drug De-addiction Therapy:—

5.7.4 (i) RML Hospital—10 beds, GB Pant Hospital—5 beds, Sucheta Kriplani Hospital—5 beds, AIIMS—8 beds.

5.7.4 (ii) The other hospitals in Delhi have also been advised to set up 10—bedded facilities.

5.7.5 *Facilities in the States:* All the States/U.Ts. in India were also requested to set up similar facilities to fight the drug abuse problem. As a result, the following States have allocated separate beds for drug de-addiction:—

5.7.5 (i) Assam-20, Maharashtra-20, Orissa-103, West Bengal-56, Arunachal Pradesh-60, Goa-1, Rajasthan-20.

5.7.6 *Linkages of hospitals with counselling centres:* 16 counselling centres for drug de-addiction sponsored by Ministry of Welfare have been linked with Delhi Hospitals to provide complete care for detoxification and after care of the patients.

5.7.7 *Private Hospitals:* Christian Medical College and Hospital, Vellore and Ludhiana and Appollo Hospitals, Madras are providing drug de-addiction facilities.

5.7.8 *Monitoring of Drug Dependent:* ICMR has launched a project devised to monitor drug dependents and the project is running in Delhi, Bombay, Calcutta, Lucknow and Jodhpur.

Working of the Prevention of Food Adulteration Act, 1954 in India  
1981-1989

(Ref. Para 5.5.2)

Year	No. of samples examined	No. of samples found adulterated	Percentage of adulteration	No. of prosecutions launched	No. of convictions	No. of cases acquitted/discharged	No. of cases pending in the Courts of Law
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1981*	1,33,242	19,050	14.2	15,801	4,588	4,326	28,364
1982*	1,29,595	16,765	12.9	15,006	3,617	5,483	36,781
1983*	1,29,062	17,965	13.9	15,581	5,294	4,818	40,715
1984*	1,22,296	14,990	12.2	13,334	4,530	4,577	43,761
1985*	1,28,511	14,677	11.4	11,783	4,702	3,947	44,610
1986*	1,21,969	13,730	11.2	10,445	3,864	3,391	44,389
1987*	1,31,391	14,091	10.7	9,597	3,347	5,016	47,637
1988*	1,30,390	15,365	11.78	9,599	2,576	3,251	50,931
1989**	73,767	5,587	7.57	4,504	927	1,796	26,220

\*Information is based on the available reports from the States/Union Territories.  
 \*\*Information for the year 1989 is tentative, since reports are yet awaited from 11 States/U.Ts.



## MEDICAL EDUCATION TRAINING AND RESEARCH



**W**ith a view to monitoring the standards of medical education, the Centre has set-up regulatory bodies. The Centre also continues to promote research and training activities to reinforce vital components of our health care delivery system. The status of these activities pursued by various bodies and institutions during the year under report is discussed in this Chapter.

### 6.2 Medical Council of India

6.2.1 The Medical Council of India was established as a Statutory Body under the provisions of the Indian Medical Council Act, 1956 with minor amendments in 1958 (36 of 1958) and 1964 (24 of 1964). The main functions of the Council are as follows:—

- (i) Maintenance of uniform standards of medical education both Under-

graduate and Post-graduate level;

- (ii) Maintenance of All India Medical Register;
- (iii) Reciprocity with foreign countries in the matter of mutual recognition of medical qualifications;
- (iv) Continuing Medical Education; and
- (v) Admission to Under-graduate and Post-graduate Studies in U.S.S.R.

6.2.2 During the year 1990-91, the Hon'ble Delhi High Court by its order pronounced on 21.5.1990 in Writ Petition No. 1003 of 1990—Dr. Harcharan Singh—Vs. Medical Council of India and others appointed Dr. A.K. Mukherjee as Administrator of the Council till the disposal of the writ petition. The Court further directed that Dr. Mukherjee should perform



all day-to-day duties that are required to be performed by the Secretary. All orders passed by him would be subject to final orders by the Hon'ble Court.

6.2.3 The Council carried out 20 inspections of medical colleges for recognition of their M.B.B.S. degrees as well as approval of the colleges. The Council also carried out 21 inspections of the non-teaching hospitals for recognition of housemanship and internship, 91 inspections were carried out during the year for Post-graduate degree/diploma qualifications for approval of starting, recognition and periodicals of medical institutions.

6.2.4 During the year, the Council has registered 35 doctors with their additional qualifications u/s 26; issued 32 Good Standing Certificates; 515 Provisional; and 507 Permanent Registration Certificates u/s 25(2) and 23 of the I.M.C. Act, 1956.

6.2.5 Eight C.M.E. Programmes at different centres were organised during the year.

6.2.6 A delegation of the Medical Council of India visited U.S.S.R. for recognition of the Post-graduate qualifications awarded by the U.S.S.R. institutions and also visited Nepal for recognition of the M.B.B.S. degree awarded by the Tribhuvan University, Nepal.

### **6.3 Policy Regarding Establishment of Medical Colleges**

6.3.1 There are 132 medical colleges in the country as per information available with the Medical Council of India with more than 14,000 admissions per annum. However, the medical degrees of only 106 medical colleges are recognised by the Medical Council of India and in addition, temporary recognition has been given to a few more medical colleges. During the 6th Five Year Plan and the 7th Five Year Plan, the policy of the Govt. of India had been not to encourage the setting up of

new medical colleges in the country as the out-turn of medical graduates every year from the existing medical colleges was considered sufficient to meet the medical manpower requirement of the country. The same policy is being followed during the 8th Five Year Plan also. Violations of this Policy, particularly by the private sector in last few years is being countered by bringing to the notice of the State Govts. recommendations of the Central Council of Health and Family Welfare against setting up new medical colleges or increasing the admission capacity of the existing medical colleges.

6.3.2 In accordance with the Indian Medical Council (Amendment) Bill as reported by the Joint Committee of Parliament, prior permission of the Medical Council/ Govt. of India is required before establishment of a medical college, increase of seats in medical colleges and starting of new or higher course of study or training etc.

6.3.3 A meeting of medical experts was held under the chairmanship of Union Health Secretary on the 27th July, 1990 to discuss the issues like the establishment of new medical colleges, compulsory rural service for medical graduates, etc. The over-whelming opinion expressed in the meeting was that no new medical college should be permitted to be established in the country in view of the surplus availability of qualified medical practitioners and so far as compulsory rural service is concerned, such service should be encouraged only by way of providing more incentives and decision should be taken after due consideration. It was also pointed out that a few State Governments had made it compulsory for doctors appointed to Govt. service to put in a specified number of years in a rural area. A few State Governments had also started a system of obtaining bonds from the medical students for serving in that State for a few years after obtaining the MBBS degree.



6.3.4 In view of the over-whelming demand for introduction of medium of Hindi in medical and para medical education, the Govt. of India appointed a Committee in November, 1988 under the chairmanship of Shri M.C. Pandey. The Govt. had issued orders on the 23rd October, 1990 that the question papers for the All India Entrance Examination for admissions to the Under-graduate medical and dental courses should be prepared both in English and in Hindi, simultaneously by the Central Board of Examinations, starting from the Academic Session 1991-92.

#### 6.4 Dental Council of India

6.4.1 The Dental Council of India is a statutory body set up under the Dentists Act, 1948, with the prime objective of regulating the dental education, dental profession and ethics in the country. For this purpose, the Council periodically carries out inspection of the dental institutions to ascertain the adequacy of courses and facilities available for the teaching of dentistry.

6.4.2 During the year the Council had permitted two institutions to open Dental College. Three Dental Colleges had also been permitted to start M.D.S. Course. Two Dental Colleges had been granted permission to start Dental Hygienist and Dental Mechanic Course. Nine Dental Colleges in the country were inspected during the year 1989-90. A provision of Rs. 12.00 lakh had been made for providing grant-in-aid to the Council during the year 1990-91, as against the release of Rs. 11.00 lakh as grant-in-aid during 1989-90.

#### 6.5 Dental Health Care Services Programme

6.5.1 Dental Health Care has so far been, by and large, neglected in the country. As a result of this, the incidence of dental diseases in the country is very high. The Government of India had decided to implement the Dental Health Care Services

Programme during the 7th Five Year Plan period. The Planning Commission had tentatively allocated a sum of Rs. 25.00 lakh for launching of the programme during the 7th Five Year Plan period. It was proposed to introduce the preventive and promotive Dental Health Care to rural population on a pilot basis only, through dental hygienists. Funds to the extent of Rs. 1.76 lakh were released to the State Government of Haryana during the year 1988-89 to implement the programme.

6.5.2 The Government of India have decided to continue the Dental Health Care Services Programme during the Eighth Five Year Plan period. Under the Programme, it was envisaged to train 30 dental hygienists during the year 1990-91. A provision of Rs. 7.00 lakh has been made for the year 1990-91.

#### 6.6. Indian Nursing Council

6.6.1 The Indian Nursing Council is a statutory body constituted under the Indian Nursing Council Act, 1947. The Council is responsible for regulation and maintenance of uniform standard of training for Nurses, Midwives, Auxiliary Nurse-Midwives and Health Visitors. The Council prescribes syllabus and regulations for various nursing courses.

6.6.2 The inspection of Nursing Schools and Examination Centres is done to maintain uniformity and high standard of Nursing education in the country. During the year 1989-90, 118 institutions were inspected. It was proposed to inspect 200 Schools/Colleges during the year 1990-91.

6.6.3 According to information collected by the Indian Nursing Council, the total number of qualified personnel is as follows:—

Nurses (GNM)	:	2,45,405
A.N.M.	:	1,32,923
Health Visitors	:	15,817

6.6.4 A provision of Rs. 6.00 lakh had



been made during the year 1990-91 for providing grant-in-aid to the Council, as against the sum of Rs. 3.42 lakh released during 1989-90.

## **6.7 Pharmacy Council of India**

6.7.1 The Pharmacy Council of India is a statutory body constituted under the Pharmacy Act, 1948. The Council is responsible for regulation and maintenance of uniform standard of training of Pharmacists in the country. It prescribes syllabus and regulations for diploma course in Pharmacy and registration of Pharmacists.

6.7.2 During the year 1989-90, 198 inspections of the institutions imparting diploma and degree Courses in Pharmacy were carried out. At present, there are 218 institutions having an admission capacity of about 11875 students per annum and 45 institutions imparting degree course in Pharmacy with admission capacity of about 1682 per annum. The Council had approved 1461 institutions in the country for imparting practical training to 5084 students. An amount of Rs. 7.90 lakh had been provided in B.E. 1990-91 for releasing grant-in-aid to the Council as against Rs. 5.30 lakh released during the year 1989-90.

## **6.8 All India Entrance Examination for Admission to MBBS/BDS Course, 1990**

6.8.1 Third Pre-Medical/Pre-Dental Entrance Examination was conducted by Central Board of Secondary Education on 13th May, 1990 in respect of the 15% seats in Medical/Dental Courses at 174 Centres spread all over the country. The sale of Bulletin of Information and application form was done from 111 branches of Canara Bank all over the country w.e.f. 16.1.90 in addition to the offices of the Board at Madras, Guwahati and Ajmer. 90645 candidates were registered out of which 81222 appeared at the examination. 1600 candidates were placed in the merit

list and 1056 candidates in the waiting list.

6.8.2 CBSE met its finances through its own resources and did not obtain any grant from the Government during the period for this purpose.

## **6.9 All India Entrance Examination for Admission to 25% Post-graduate Seats conducted by AIIMS, New Delhi**

6.9.1 In compliance with the directive given by the Hon'ble Supreme Court of India on 25th September, 1987, A.I.I.M.S. organised and conducted the Third All India Entrance Examination for admission to various Post-graduate Medical & Dental Courses (MD/MS/Diploma/MDS) on All India basis, for 25 percent of the total seats in recognised Medical and Dental Colleges.

6.9.2 The examination was held at 15 Capital cities in the country on the 21st January, 1990. A total of 21001 applications were received. Out of this, 20438 applications were for admission to MD/MS/Diploma Courses and 563 for admission to MDS Course. 17393 candidates appeared in the MD/MS/Diploma Courses and 438 candidates appeared for admission to MDS Course. The result was declared on the 22nd March, 1990 and handed over to the Director General of Health Services, New Delhi for allotment of seats/colleges to the candidates who qualified in the entrance examination. There were 1776 seats in MD/MS/Diploma Courses, 31 in MDS Courses at various Medical/Dental Colleges.

## **6.10 National Board of Examinations**

6.10.1 The National Board of Examinations was initially established as a wing of the National Academy of Medical Sciences in 1975 and it became an independent entity in 1982 when it was



registered as a Society under the Societies Registration Act.

6.10.2 The Board conducts post-graduate medical examinations in 39 disciplines (28 broad specialities and 11 super specialities) of modern medicine at the national level. The Board thus is an all-India evaluation agency helping in maintenance of a high, uniform standard of post-graduate medical education and training. The Board ensures that candidates certified by the Board after examinations have proper training, skills, competencies and attitudes in their respective fields.

6.10.3 The other objective of the Board is to do accreditation of various Institutions which provide adequate facilities for specialist training to candidates. It also maintains liaison with professional associations concerned with higher medical education and promotes effective linkages on a continuing basis among the academic, technical, evaluation, scientific and research agencies working in the field of medical and other allied sciences.

6.10.4 The Board awards qualifications known as Diplomate of the National Board, in the speciality concerned, which is recognised as equivalent to Post-graduate medical degree. These qualifications are included in the First Schedule to the Indian Medical Council Act, 1956.

6.10.5 The examinations of the Board are conducted twice a year in February and August in 39 disciplines. 1913 candidates had qualified in these prestigious examinations till 1989. The following was the result of the Board's examinations for the year 1989:—

PRIMARY		FINAL	
Appeared	Passed	Appeared	Passed
1864	605	1081	249

6.10.6 About 110 hospitals/institutions have been accredited by the Board after inspection, in various specialities.

6.10.7 The Board has organised workshops in medicine and allied sciences for generating multiple choice questions in different formats. There is a well stocked question Bank in various disciplines in the Board.

6.10.8 The Board has prepared a comprehensive Eighth Five Year Plan for improving the outreach of the services of the Board, consolidation of its activities, identification and development of core areas for growth and promotion and establishment of linkages with other evaluation/organisations and Speciality Professional Associations, reinforcement of Speciality Boards, examination reforms, strengthening of questions bank etc. as also a staff restructuring plan and provision for acquisition of land and construction of office building and residential accommodation.

6.10.9 A sum of Rs. 30 lakh was allotted for the year 1990-91.

6.10.10 Beside this, the Board is also having its own income from examination fees etc.

6.11 **National Academy of Medical Sciences, New Delhi**

6.11.1 The National Academy of Medical Sciences was established in 1961 as a non-official body of bio-medical scientists, with the object of promoting the growth of medical sciences and recognition and encouragement of merit in medical sciences.

6.11.2 On 31st March, 1990, the Academy had on its rolls 7 Honorary Fellows, 574 Fellows and 1043 Members. One Honorary Fellow, 10 Fellows and 24 Members were admitted at the 29th Annual Meeting of the Academy held in Bombay on 3rd May, 1990.

6.11.3 *CME Programme:* To keep medical professionals abreast with new developments and changing practices and for



preparing candidates for post-graduate examinations, including those held by the National Board of Examinations, a programme of Continuing Medical Education (CME) is being implemented by the Academy since 1982, as per pattern approved by the Govt. of India.

6.11.4 During the current year, upto December, 1990 assistance has been provided for conducting 85 Seminars/Symposia/Workshops etc. at the well established medical institutions in India taking the commulative total to 626 programmes since inception of the programme.

6.11.5 The CME programme also covers Human Resource Development by the placement of Scientists under which facilities are also provided to the specialists at the middle level for exposure to advance methods and techniques at centres of excellence. 60 Medical Scientists/Teachers have completed training in selected areas at various specialised centres. Out of 25 candidates selected for receiving training at the specialised centres during the current year, five have already availed of the training.

6.11.6 *Fellowship for Junior Scientists (participation of Junior Medical Scientists from India in Workshops and Short Term Courses)*: During the year, 40 Junior Scientists working in medical institutions in India have been provided Fellowships for participation in Workshops so as to enable them to avail of the opportunities offered for exposure to frontiers of science in basic and applied clinical sciences, epidemiology, etc.

## **6.12 All India Institute of Medical Sciences, New Delhi**

6.12.1 The All India Institute of Medical Sciences, established by an Act of Parliament in 1956, enjoys the status of an

institution of national importance. The objects of the Institute are:

- (a) to develop pattern of teaching in Under-graduate and Post-graduate medical education in all its branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India;
- (b) to bring together at one place educational facilities of the highest order for the training of personnel in all important branches of health activity; and
- (c) to attain self-sufficiency in Post-graduate medical education.

6.12.2 The Institute is fully funded by the Government of India. For research purposes, however, grants are received from various sources including national and international agencies. The Institute collects fees from Under-graduate and Post-graduate students as per prescribed schedules. While the major part of the services are free for the patients coming to the AIIMS hospitals, certain categories of patients are charged for treatment/services rendered to them. Specialised investigations and services are charged at a subsidised rate.

6.12.3 *Medical Education: Post-graduate Medical Education*: During 1990-91 (Jan. '90), 215 students (in one session) i.e. for the courses commencing in January, '90 and July, '90, were admitted to various Post-graduate courses i.e. M.D., M.S., M.H.A., M.Sc. and to Post-doctoral degrees like the Ph.D., M.Ch. and D.M. in various specialities of medicine, surgery and non-clinical subjects. Twenty-one candidates belonging to the Scheduled Castes and nine belonging to the Scheduled Tribes got admission to the Post-graduate courses. The Institute provides 45 full time Post-graduate and Post-doctoral courses. In the year under review 57 Post-graduate students qualified for



various degrees/ The guiding principles in Post-graduate training is to train them as teachers, researchers and above all as competent doctors to give their best to the patients.

6.12.3(i) 60 candidates from various organisations and State Governments received short-term training at the Institute during the year.

6.12.3(ii) *Under-graduate Medical Education:* This year the Institute admitted 49 students to its MBBS Course, 14 students to B.Sc. Nursing (Post-certificate) Course, 49 students to B.Sc.(Hons.) in Nursing Course, 18 students to B.Sc. (Hons.) in Human Biology Course, 10 students to B.Sc. (Hons.) in Ophthalmic Techniques, 4 students to B.Sc. (Hons.) in Medical Technology in Radiography and 3 students in B.Sc. (Hons.) in Speech and Hearing. To the MBBS Course 6 students from the Scheduled Castes and 4 from the Scheduled Tribes were admitted.

6.12.3(iii) *Continuing Medical Education:* The Institute organised a number of workshops, symposia and conferences in collaboration with various national and international agencies during the year. Professionals from various institutions all over the country participated in these seminars and workshops and benefited with update knowledge. The members of the AIIMS faculty served as guest faculty in CME programmes organised by other medical colleges in the country.

6.12.3(iv) *Training for Scheduled Castes (SC) and the Scheduled Tribes (ST) Candidates:* The SC and ST candidates are given due consideration and weightage in accordance with the Govt. of India guidelines in all selections. During the current year, 21 SC and 9 ST candidates were selected for the Post-graduate courses; 6 SC and 4 ST candidates were selected to the MBBS Course; one SC candidate each to the para-medical courses of Radiography, Speech and Hearing and one ST candidate to Post-

Certificate (Nursing) were selected. For courses in Ophthalmic Technique and B.Sc. (Hons.) Nursing, 2 SC candidates each got selected.

6.12.4 *International Role:* The Institute continued to provide consultancy services to several neighbouring countries under the aegis of international agencies. During 1990-91, the Institute trained 5 WHO Fellows (2 from Myanmar, 1 from Maldives and 2 from Afghanistan) besides training 14 elective trainees from Germany, Britain, New Zealand, U.K., Canada, Netherlands and USA to fulfil its international obligations.

6.12.5 *Research:* Medical Research is a vital component of the Institute's activities. The faculty of the Institute carries out research in areas relevant to the national health-care needs. The Institute provides a small grant of about Rs. 9.00 lakh for research to the junior members of the faculty. However, a much bigger research fund of over Rs. 4 crore is received by the faculty from national and international funding agencies like Department of Science and Technology, Indian Council of Medical Research, Council of Scientific and Industrial Research, Integrated Child Development Services, Department of Environment, UNICEF, WHO, etc. The researchers also attract funds from a number of reputed drug companies. These funds are received purely on merit of the research projects which are approved on competitive basis. Some of the frontline research areas are: liver diseases, diabetes, iodine deficiency disorders, rheumatic fever and rheumatic heart diseases, studies on flouride, genetic study of congenital glaucoma, AIDS, bio-technology etc.

6.12.6 *Community Services:* Community service is an integral part of the activities of the Institute. The Comprehensive Rural Health Services Project at Ballabgarh and Urban Health Centre at Malviyanagar continue to provide useful service at the doorsteps of the community. Besides, De-



partment of Obstetrics and Gynaecology and Dr. R.P. Centre for Ophthalmic Sciences have been actively involved in various community health-care activities.

6.12.6 (i) Dr. R.P. Centre for Ophthalmic Sciences organised 22 Eye Camps in Delhi, U.P. and Haryana from 1.4.89 to 31.3.1990. From 1.4.90 to 30.9.90 the Centre this year had organised only one Eye Camp in the district of Faridabad. More camps could not be organised in view of disturbing situation prevailing in Northern India during September and October.

6.12.6 (ii) In its efforts to disseminate scientific knowledge on prevention of disease and health education, the Institute continues to organise public lectures on various health problems for the benefit of the common mass. This programme receives commendable response both from the public and the press.

6.12.7 *Patient Care Services:* The patient-load on the AIIMS hospitals is ever increasing. However, during 1989-90 there was a strike for 48 days by the Resident Doctors, thereby bringing down the total number of patients compared to the last year. During 1990-91, although a rising trend was obvious during the first 4 months, the overall patient attendance and the related surgical and admission figures were likely to go down since the AIIMS hospitals were closed for 26 days due to a strike by the Karamcharis in the month of August-September, 1990. During 1989-90, the OPDs of the Main Hospital attended to 10,19,277 patients and admitted 43,432 patients. A total number of 73,985 surgical procedures were conducted. During the first four months of the current year (1990-91) the main hospital of the Institute attended to 3,50,512 patients in the OPDs (averaging to more than 3,500 patients per working day) and admitted 15,701 patients.

6.12.7 (i) During 1989-90, the OPDs and Clinics of Dr. R.P. Centre for Ophthalmic Sciences attended to 2,47,641 patients and 9,309 patients were admitted. A total number of 11,191 surgical procedures were conducted for various eye ailments. During the first six months upto September, 1990, the Centre's hospital attended to 1,27,162 patients in the OPD and admitted 3,683 patients.

6.12.7 (ii) During the current year, the Neuro-sciences Centre and Cardiothoracic Centre made tremendous progress both in the quality and quantity of their performance with institution of better ICU and Post-operative facilities. The Neuro-sciences Centre has consolidated the patient care facilities in the new building. The Cardiothoracic Centre also achieved new heights with greater number of patient-attendance and operative procedures. During the first six months of the current year (1.4.90 to 30.9.90), the Department of CTVS conducted 905 heart operations while the Department of Neuro-surgery performed 746 procedures. The Cardiothoracic Centre attended to 89,109 patients while the Neuro-sciences Centre attended to 18,671 patients in their OPDs during this period. In the Cardiothoracic Centre a paying ward with 14 rooms was commissioned and a similar facility is about to be commissioned in the Neuro-sciences Centre during this year.

6.12.7 (iii) The Institute—Rotary Cancer Hospital attended to 11,878 patients in the OPD, admitted 1,985 patients, provided Chemotherapy to 2,676 cases and Radiotherapy to 1,241 cases. During this period, 952 cancer-related surgeries were undertaken.

6.12.8 *New Director:* Prof. S.K. Kacker was selected to take over as the 7th Director of AIIMS from Prof. Sneh Bhargava who retired. Prof. Kacker formally took over as the Director on 15th October, 1990.



**All India Institute of Medical Sciences**  
**Budgetary Position For The Year 1990-91 & 1991-92**

(Rs. in Lakhs)

(Ref. Para 6.12)

Sl. No.	Particulars	Non-Plan			Plan		
		Appd B.E. As proposed by AIIMS			Appd. BE As proposed by AIIMS		
		1990-91	RE 90-91	BE 91-92	90-91	RE 90-91	BE 91-92
1.	AIIMS (Main)	2552.75	2930.50	3272.50	600.00	1002.00	1975.00
2.	Superspecialists	405.00	546.00	653.00	450.00	451.00	2208.00
3.	Dr. R.P. Centre	345.25	376.00	395.00	100.00	102.00	131.00
4.	IRCH	97.00	166.65	191.33	—	202.05	496.35
5.	All India P.G. Entrance Exam.	—	20.00	22.50	—	—	20.00
6.	Drug De-addiction Centre	—	—	—	70.00	163.50	194.50
Total		3400.00	4039.00	4534.33	1220.00	1920.55	5024.85

### 6.13 Post-Graduate Institute of Medical Education & Research Chandigarh

6.13.1 The Post-graduate Institute of Medical Education and Research, Chandigarh offers 72 different courses leading to the award of degrees of B.Sc., M.Sc., M.Ch., D.M., M.D., M.S., M.D.S. and Ph.D etc. As on 31.10.1990, a total of 3,086 residents (including 95 during the year) had completed their training and obtained their Post-graduate qualifications. During the period under report, there were 532 whole time Junior Residents/Post-graduates on the rolls of the Institute pursuing various Post-graduate Courses, 17 candidates were on the rolls for different M.Sc. Medical Technology Courses, 63 for B.Sc. Medical Technology (X-Ray and Laboratory), 7 for B.Sc. (Audiology and Speech Therapy) Course and 20 for Operation Theatre Assistant Course. The College of Nursing affiliated to the Punjab University has on its rolls 76 candidates for B.Sc. Nursing (Post-basic), 188 B.Sc. Nursing (4 years Course) and 18 for M.Sc. Nursing Courses.

6.13.2 The Nehru Hospital attached to the Institute has a bed strength of 819. During the year 1989-90, number of registered inpatients and outpatients was 27,268 and 700,485 respectively.

6.13.3 Research work is in progress in

various departments of the Institute. 180 research schemes are funded by the Institute itself and the rest by various government and non-government bodies.

6.13.4 The Institute, in addition to basic and applied research being undertaken in all the disciplines carried out research on the national priority areas such as Malnutrition, Vitamin A deficiency, Leprosy, Diarrhoeal Diseases, Amoebiasis, Cancer, Malaria, Filariasis, Hepatitis, Family Planning Programmes, Anti Fertility Vaccine, Eradication of Blindness, Rehabilitation of the disabled. Prevention and Treatment of diseases to which the Scheduled Castes and Scheduled Tribes communities are prone, are also being studied. The Institute is equally involved in research for the rural and community related health problems. The Institute has also been recognised for carrying out research on the immediate health priority areas of Union Territory of Chandigarh with particular reference to environmental pollution-related diseases, their diagnosis, prevention and treatment. The Institute has been recognised by the Indian Council of Medical Research, New Delhi for investigative survey of AIDS as well.

6.13.5 The Institute has been holding seminars, symposia & continuing medical education programmes for updating the



knowledge of the faculty as well as the medical teachers hailing from the regional and national medical colleges.

6.13.6 A new sophisticated instrumentation centre has been established to provide a big boost to research work being done at this Institute.

6.13.7 The approved budget estimates for non-plan and plan for the year 1990-91 were Rs. 2280.00 lakh and Rs. 720.00 lakh respectively.

#### 6.14 Jawaharlal Institute of Post-graduate Medical Education and Research, Pondicherry

6.14.1 The Jawaharlal Institute of Post-graduate Medical Education and Research, Pondicherry, popularly known as 'JIPMER' is fully financed and administered by the Ministry. This erstwhile Medical College in Pondicherry was upgraded to Regional Post-graduate Centre in July, 1964. The hospital attached to the Institute started functioning from April, 1966.

6.14.2 The Institute is affiliated to the Central University of Pondicherry. It conducts both Under-graduate and Post-graduate Medical Courses and also Post-Doctoral Course. M.Ch. in the subject of Cardio-Urinary Surgery. The Institute imparts training to other para-medical personnel and is also engaged in research activities. As on 30th September, 1990, the total number of students who completed their training and obtained degree/diploma from this Institute are as under:

M.B.B.S	—	1695
P.G. Degree (Medical)	—	588
P.G. Diploma (Medical)	—	445
Post-Doctoral M.Ch. (Genito-Urinary Surgery)	—	4
M.Sc. (Medical Bio-chemistry)	—	276
B.Sc. (MLT)	—	77
B.M.R.Sc.	—	41

M.R.O/M.R.T. Training	—	108
French Certificate/Diploma	—	1275

6.14.3 The present bed strength of the hospital attached to the Institute is 859 including 20 leprosy ward beds as well as 64 paying ward beds. The broader objectives of the Institute hospital are to extend to the people of Pondicherry and the neighbouring areas a comprehensive service in the field of medical care, to impart rural orientation and emphasise the preventive and promotional aspects of community health and to integrate family welfare with the general package of health and nutritional service.

6.14.4 The Institute has a well-equipped Central Library with a rich stock of latest books and journals.

6.14.5 The approved 7th Plan outlay of the Institute was Rs. 300.00 lakh. The approved Annual Plan outlay for 1990-91 was Rs. 200.00 lakh (Revenue—Rs. 100.00 lakh and Capital—Rs. 100.00 lakh). The sanctioned budget provision for the Institute for the year 1990-91 was Rs. 1185.00 lakh (i.e. Rs. 100.00 lakh under Plan and Rs. 1085.00 lakh under Non-Plan).

#### 6.15 Lady Hardinge Medical College & Associated Hospitals, New Delhi

6.15.1 The Lady Hardinge Medical College and the associated hospital Smt. Sucheta Kriplani Hospital was established in the year 1916 with the main object of providing higher medical education for women, medical care for women and children and training of women nurses. The Kalawati Saran Children's Hospital attached to the Institution was built in 1956. These Institutions are functioning now as Subordinate offices under the Directorate General of Health Services, New Delhi.

6.15.2 *Lady Hardinge Medical College:* The Collège is affiliated to the University of Delhi and offers instructions in M.B.B.S. and Post-graduate Courses in various disciplines. During the year 1990



the number of admissions to First Year M.B.B.S. Course was 130 including foreign students from Commonwealth countries under General Cultural Scholarship Scheme and Self-financing Scheme. The total number of Under-graduates including interns on the rolls of the Institution at present is 784. Total number of P.G. Students enrolled for the session 1989-92 and 1990-93 are 47 and 143 respectively. There are 105 S.C. and 58 S.T. students in the Institution.

**6.15.3 School of Nursing:** The School of Nursing run by this Institution admits 100 students including 5 from Sikkim. At present total number of nursing students is 261 including 17 students from foreign countries. Students from Dr. Ram Manohar Lohia Hospital were given practical experience in Smt. S.K. Hospital since there is no field for midwifery training at Ram Manohar Lohia Hospital. This Institution also provides rich field experience to Public Health Students, Rajkumari Amrit Kaur College and Lady Reading Health School.

**6.15.4 Hospital: Patient Care, Teaching Under-graduate and Post-graduate Students) Research and Extra-curricular Activities:** Total bed strength of Smt. S.K. Hospital, at present, is 805. The Kalawati Saran Children's Hospital is having bed strength of 284 including 25 beds in emergency and intensive care. This Hospital has full-fledged Deptt. of Physical Medicine & Rehabilitation for imparting curative, preventive and rehabilitative services to handicapped patients. Similarly, Child Health Promotion Clinic is imparting community health care services by providing full immunisation services, well-baby clinics and family welfare services.

**6.15.4 (i)** These two hospitals, along with additional beds for clinical units in Medical, Surgical and Ortho Surgery at Dr. Ram Manohar Lohia Hospital having 70, 60 and 20 beds respectively provide training to students in these

specialities on female, male and child patients.

**6.15.4 (ii) Special Services given in the Hospitals:** The Institution gives the following round the clock special services in addition to the routine patient care and Laboratory services:

1. E.C.G.
2. X-Ray Services : In S.K.H. and K.S.C.H.
3. Laboratory Services : Blood Bank  
Haematology  
Biochemistry
4. Embalming of dead : S.K. Hospital (practically for whole of Delhi the embalming service for the V.I.P. and foreign dignatories).
5. Police (Autopsies) : Post Martem for the zones which have been allocated to this hospital.
6. 24 hours emergency with emergency operation facility.
7. I.C.U. : A modern Intensive Care Unit is functioning under the Department of Anaesthesia with all required facilities and attached Laboratory.
8. Drug De-addiction Unit : This Unit transferred from Safdarjung Hospital on 18.1.89 is having sanctioned strength of 30 beds. At present, it is functioning with 14 beds. The Unit is a designated Centre set-up by the Govt. of India for early detection and treatment of all types of addictions and is open to males and females with both outdoor and indoor facilities.

**6.15.4 (iii) Performance:** The Institution is actively involved in various Govt. Health and Family Welfare and MCH Services and serves the people of Delhi and adjoining areas. These services include: Family Welfare Programme;



Universal Immunisation Programme; Expanded Programme on Immunisation; Blindness Control; Leprosy Control; Malaria and Filaria Eradication; and T.B. Eradication.

6.15.4 (iii) (a) The Khichripur Health Centre is functioning since May, 1976 and providing comprehensive medical care in Khichripur-Kalyanpuri area.

6.15.4 (iii) (b) Through R.O.M.E. Scheme service was provided at door steps to rural population by the students and staff of the college through P.H.C. Palam, and Rural Health and Training Centre, Najafgarh.

6.15.4 (iv) Medical aid and other services were provided to the patients in SSK Hospital and K.S.C. Hospital as under:

	S.S.K.	K.S.C.H.
1. Casualty Attendance	21828	36865
2. O.P.D. Attendance		
(a) New	291264	264137
(b) Old	170911	
3. Indoor Admissions		
(a) Patients	29020	23403
(b) New Borns	12456	12201
4. Operations		
(Indoor)		
(a) Major	6673	729
(b) Minor	11340	2316
5. Deliveries	13489	N.A
6. Abortions	2132	—
7. M.T.Ps	1880	—
8. Sterilizations	2495	—
9. I.U.Ds	1898	—
10. Nirodhs	530290	—
11. Oral Pills	313	

6.15.4 (v) This Institution has undertaken immunisation coverage through

U.I.P. and E.P.I. Programmes. The total number vaccinated is as under:

B.C.G.	7025
D.P.T.	15145
Polio	16267
Measles	2723
D.T.	1213
Vitamin 'A'	2982

6.15.4 (vi) The College and hospitals are teaching the occupational therapy and physiotherapy students of the Institute for the Physically Handicapped at Rouse Avenue, New Delhi and also providing training to Pharmacy students.

6.15.4 (vii) Clinical investigations in Cytology, Chemical Pathology, Haematology, Surgical Pathology and Clinical Biochemistry & Pathology and Microbiology were carried out during the year 1990. These totalled 323222 in Smt. S.K. and 151453 in K.S.C. Hospital.

6.15.4 (viii) *Blood Bank*: 3880 Units of blood were collected and 5800 units of blood were issued. Voluntary blood donation camps were organised by this Institution in collaboration with Red Cross Society and the blood as collected was utilised for the needy patients.

6.15.4 (ix) In addition, the Department of Family Planning at the Hospital organised camps to conduct MTPs, Tubectomies, Vasectomies, IUDs, Sterilisations every month at P.H.C. Palam, except in summer months.

6.15.4 (x) Numerous programmes like teaching of Under-graduates, Post-graduates, teaching of OT & PT students, Nursing students, research in basic and clinical sciences, rural scheme, cancer surveillance and WHO collaboration centres etc. are continuing from the previous year.

6.15.4 (xi) *New programmes*: Apart from setting up a new telephone exchange, new



additions in the Department of Obstetrics and Gynaecology include:

- i) A laser machine in the Deptt. of Obstetrics and Gynaecology for treatment of Cancer of the Cervix.
- ii) An ultrasound machine (being installed) in the labour room.

6.15.5 *Kalawati Saran Children's Hospital*: Acute Respiratory Infection Control Programme: A centre for training of State level and District level Medical Officers on Acute Respiratory Infection Control Programme was started in December, 1990 and 22 teachers trained from 10th to 13th December, 1990.

6.15.5 (i) *Children's Integrated Development Services Scheme*: A training programme was conducted and 25 teachers trained in 1990.

6.15.5 (ii) Various departments of the Institutions have started 50 new programmes/research projects for better medical services.

6.15.5 (iii) The hospital continues to promote the use of Hindi in its day to day work in an increasing measure.

#### 6.16 **Mahatma Gandhi Institute of Medical Sciences, Sewagram (Kasturba Health Society)**

6.16.1 The Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha was set up in commemoration of Mahatma Gandhi Centenary Celebrations in 1969. It has at present an annual admission capacity of 64 students. It is the first and the only medical college in the country to be located in a rural surrounding and exposes the students to the health problems of the rural areas. The Institute has 501-bedded hospital with excellent diagnostic and curative facilities and has an adequate base for under-graduate and post-graduate training and research. The Institute is administered by the Kasturba

Health Society registered under the Societies Registration Act. The Institute has developed various innovative programmes to give exposure to the students regarding health and related problems of rural areas. Students and faculty wear Khadi, attend prayers every Friday and emphasise on character building, simple life and dignity of labour. Students are drawn from all over India. According to the pattern of financial assistance, the annual expenditure of the Institute is shared between the Government of India, Government of Maharashtra and the Kasturba Health Society in the proportion of 50:25:25. The Central Government released grant-in-aid of Rs. 172 lakh to the Society for the maintenance of the Medical College during 1989-90. During 1990-91 a provision of Rs. 253.65 lakh was agreed to in the revised estimates for this Institution.

#### 6.17 **All India Institute of Hygiene & Public Health, Calcutta**

6.17.1 All India Institute of Hygiene and Public Health is the pioneer Institute in the field of Public Health in our country. The Institute was established in Calcutta on 30th December, 1932. It is the oldest school of public health devoted to Post-graduate teaching and research in various disciplines of health and related sciences in both India and South East Asia.

6.17.2 The Institute was set up with the following aims and objectives:—

- (i) To develop health manpower in the country by providing post-graduate public health training facilities of the highest order.
- (ii) To conduct research directed towards the solution of various health problems and diseases in the country.
- (iii) To undertake operational research, to develop methods for optimum utilisation of health resources and



application of the findings for protection and promotion of health care services.

6.17.3 The Institute is headed by a Director. It has thirteen academic departments, each headed by a Professor or an Associate Professor. The departments are:

1. Bio-chemistry and Nutrition; 2. Epidemiology; 3. Health Education; 4. Maternity and Child Health; 5. Microbiology; 6. Occupational Health; 7. Preventive & Social Medicine; 8. Public Health Administration; 9. Public Health Nursing; 10. Sanitary Engineering; 11. Statistics and Demography; 12. Rural Health Unit & Training Centre, Singur; and 13. Urban Health Centre, Chetla, Calcutta.

6.17.4 *Manpower Development:* The Institute conducted during the year one Doctoral Degree Course, two Masters Degree Courses, seven Diploma Courses, one Certificate Course and many Orientation/Refresher Training Programmes supported by Govt. of India or International Organisations. The teaching and training programmes undertaken by the Institute aim at development of manpower in the field of Public Health and provide facilities for various disciplines e.g. medical doctors, epidemiologists, microbiologists, nurses, nutritionists, dietitians, health educationists, health statisticians, veterinarians, demographers, social scientists etc. During the year 1990-91, students were registered for the training in various courses as mentioned below:—

Master & Degree Courses	—	39
Diploma Courses	—	169
Short Courses	—	554

6.17.5 *Services:* Apart from providing service to the people through the Urban and Rural Health Centres attached to the Institute, the Departments undertook

the responsibility for providing technical and consultative services to various State Govts., Industries and Organisations throughout the country.

6.17.5 (i) Health Centre, Chetla, the urban practice field area of the Institute was established on 30th December, 1955. It covers an area of 3.9 sq.km. and caters to an estimated population of more than one lakh. The activities comprise registration of vital events and well organised comprehensive health care and laboratory services, programmes for the Control of Communicable Diseases, MCH, Family Welfare, School Health, Nutrition and Health Education Services.

6.17.5 (ii) The Rural Practice Field Unit and Training Centre, Singur, was established in 1939. It covers an area of 58.5 sq.km. spread over 60 villages and caters to an estimated population of over 80,000. The activities of the Centre are similar to those mentioned above for the Urban Health Centre. Since the health of the community depends much on environmental sanitation; both urban and rural centres provide environmental sanitation services to the community to improve the sanitation standards.

6.17.5 (iii) Technical and consultative services to various State Govts, industries and organisations were provided by several departments of the Institute. Important consultative as well as technical services were extended during the year to twenty-two Institutions:

6.17.5 (iv) The Institute is recognised as a Regional Centre (Eastern and North-Eastern Zone) for setting up laboratories under the National Drinking Water Mission, Department of Rural Development, Govt. of India. The Institute is continuing to act as WHO Collaborating Centre for water supply and sanitation. The Department of Sanitary Engineering and Environmental Sanitation is responsible for both the Regional Centre and the WHO Collaborating Centre.



6.17.5(v) There are five NRTCs all over the country out of which one Centre is situated at Biochemistry and Nutrition Department of this Institute. This Centre which is mainly responsible for coordinating the nutritional activities of the 10 Eastern and North Eastern States of India, has completed collection of detailed information on the nutritional profile of West Bengal, Orissa, Assam, Sikkim, Mizoram, Tripura, Nagaland and Meghalaya.

6.17.5 (vi) The Institute is acting as Regional Surveillance Centre for Viral Hepatitis in North Eastern States. The Department of Epidemiology and Microbiology are jointly responsible for surveillance of viral hepatitis. Further, the Institute has also been earmarked as Regional Surveillance Centre for Japanese Encephalitis in the North Eastern States.

6.17.5 (vii) The Institute has been recognised as the Regional Centre for Monitoring and Surveillance of the Universal Immunisation Programme. The Department of Epidemiology of the Institute will co-ordinate the activities of this region.

6.17.5 (viii) The West Bengal Unit of the National Nutrition Monitoring Bureau has been transferred to this Institute. The Professor and Head of the Department of Biochemistry and Nutrition has been designated as the Principal Investigator. This Unit works in close collaboration with the National Sample Survey Organisation of Government of India.

6.17.5 (ix) The Govt. of India have accepted the Preventive and Social Medicine Department of this Institute as a Collaborating Centre of W.H.O. on Disaster Management.

6.17.5 (x) Teams of experts were sent for Evaluation of Gravity Feed Water Supply Schemes for U.P., Sikkim, Manipur, Meghalaya and Mizoram during the year,

at the request of UNICEF. Various individuals and teams of experts visited other countries to provide consultancy in this specific area.

6.17.6 There were more than 60 on-going research projects during the year. These included research schemes funded by both National and International Organisations.

6.17.7 *Research Publications*: The research workers and research scholars had published 53 papers during the current year in various books and journals of National and International repute.

6.17.8 *Faculty Research Forum*: The Institute has a Faculty Research Forum. During the year, the Forum held eight sessions. Two sessions were addressed by experts from outside the Institute. It provides a unique platform where all teaching and research personnel and senior student members of the Institute exchange thoughts, ideas and experiences relevant to the research subjects taken for discussion.

6.17.9 *Seminars/Short Training Courses/Conferences*: This Institute is acting as a focal point in Eastern India for the Manpower Development Programme under the National Drinking Water Mission and also as the national focal point for training in Water and Waste Management under the World Bank sponsored International Training Network Programme.

6.17.9 (i) The first global meeting of the ITN Centre Directors was held during 16-18 September, 1990, jointly organised by the International Training Network Centre at this Institute and the UNDP/World Bank Water and Sanitation Programme to review the present ITN project concept and build and strengthen human resource development capacity for delivery of sustainable water supply and sanitation services for the unserved rural and urban areas.



6.17.9 (ii) During the year, three National Workshops were organised by the Institute. In addition, a Workshop on "Urbanisation of Nutrition" sponsored by FAO was organised at this Institute. Various Government and non-Government Organisations participated in the Workshop to draw out strategies for the upliftment of slums.

6.17.9 (iii) As part of the ICDS Programme undertaken by the Biochemistry and Nutrition Department, 4 Orientation Training Courses were organised for 5 days, duration each.

6.17.9 (iv) UNICEF-sponsored courses on Gravity Feed Water Supply System was conducted during the year by the Sanitary Engineering Department at Port Blair and Shillong. Training courses for fitters/plumbers/village caretakers for rural water supply maintenance were also conducted in the N.E. States.

6.17.9 (v) A symposium on "Occupational Health Problems of Agricultural and Plantation Workers" jointly organised by the Directorate General of Health Services and this Institute and sponsored by WHO, was held in Darjeeling on 3rd and 4th December, 1990. Managers of tea gardens, local doctors, doctors from tea gardens, trade union leaders, representatives of Planters' Association and Government officials involved in health and welfare services related to agricultural and plantation workers participated in the Symposium. The Symposium discussed the problems of these two categories of workers and the major two recommendations of this discussion were setting up of a Plantation Medical Advisory Board and appointment of atleast one MBBS doctor in each tea garden on whole time basis.

6.17.9 (vi) Prof. A.K. Chakraborty, Director-Professor, Department of Epidemiology, was awarded the Coates Medal this year (for 1986) by Calcutta University for his outstanding research work in Public

Health. He was also awarded the Col. Calvert Memorial Oration Medal by the Indian Medical Association this year.

6.17.9 (vii) Prof. S.P. Mukhopadhyay, Head of the Deptt. of Preventive and Social Medicine of this Institute, was awarded the Best Paper Prize on Rural Health at the 33rd National Congress of the Indian Public Health Association, held in Madras.

6.17.10 The Institute was sanctioned a final grant of Rs 1,32,67,000 during the year 1989-90.

6.17.11 *Forward Planning for Future Development of the Institute:* As this Institute is the Pioneer Institute in the field of public health in our country, it is necessary that this Institute does not lag far behind such Institutes of advanced countries. To Keep pace with development in the field of public health, the expansion and modernisation of this Institute call for immediate action.

## 6.18 **Central Leprosy Teaching and Research Institute, Chengalpattu, Tamil Nadu**

### 6.18.1 *Objectives of the Institute:*

- i) To train personnel of various categories for National Leprosy Eradication Programme;
- ii) To carry out applied and basic research projects;
- iii) To provide laboratory and clinical support; and
- iv) Monitoring and evaluation of National Leprosy Eradication Programme activities.

6.18.2 *Achievements:* During the year 1990, the Institute, trained 18 Medical Officers. 21 Medical Supervisors; 20 Laboratory Technicians—14 Physiotherapy Technicians; 14 Smear Technicians and awarded 2 Diploma in Leprosy.

6.18.2 (i) In addition, short term orientation courses were also provided to medi-



cal and para medical staffs.

6.18.3 *Research Activities*: Various research projects undertaken by different divisions of the Institute, were continued during 1990. These include 2 WHO-assisted projects also. Some of the research projects have since been completed and results are being analysed. In one research project on 'Palmar Plate Shortening and Fully Advancement to Correct Claw Fingers' undertaken by the Surgical Division, the results were quite encouraging and based on the study conducted, a paper was sent to the *American Journal of Hand Surgery* and it has been accepted for publication.

6.18.3 (i) On the request of the Union Territory of Lakshadweep Islands, received through the Directorate General of Health Services, the Institute has taken up a total population survey in Lakshadweep Islands.

6.18.4 *Patients Care Activities*: The Institution has a hospital with 120 beds. Besides indoor and outdoor treatment, the Institution had carried out surgical correction and had produced MCR Sheets. The footwear section had issued various types of MCR Sandals, Prosthesis and had undertaken major repairs of footwears.

6.18.5 *Monitoring and Evaluation*: The Computerised Management Information System has been developed and the Institution is processing and monitoring the various reports.

6.18.6 *Other Activities*: The Institution had organised a Workshop on early detection of Leprosy. There is a library in the Institution and during 1989-90 had subscribed for 45 periodicals (both Indian & Foreign).

**Budget Estimates**

	(Rs. in Lakh)		
	Actuals 1989-90	Budget estimates 1990-91	Revised estimates 1990-91
PLAN	43.50	40.00	36.00
NON-PLAN	78.00	90.00	N.A.

**6.19 Regional Leprosy Training and Research Institute, Raipur**

6.19.1 The Regional Leprosy Training & Research Institute, Raipur was established in the year 1979, with the goal to provide curative services to complicated leprosy patients to impart training to both medical & para-medical workers and to conduct operational research in the field of leprosy. The Institute provides indoor and outdoor services to the patients. The leprosy cases requiring Medical Drug Treatment as well as the patients with reactions and those who have highly infected ulcer are admitted here. The Institute is conducting training courses of four months duration for para-medical-workers, Orientation Courses for 6 weeks for Medical Officers and 3 months Re-orientation Training Course for Laboratory Technicians and 2 months training course for N.M.S. The Institute is also engaged in carrying out applied research in the field of leprosy. The activities of the Institute during 1990 are given as under:—

*Treatment Activities:*

- (i) *Out-Patients Services*:—(OPD) — Services are provided to voluntary reported and referred leprosy patients of the region. During the year upto December, 1990, 702 new patients were registered and 208 patients completed their treatment.
- ii) *In-Patient Services*: The Institute has indoor facility with 75 bedded hospital where referred patients and other patients with complications are treated. Number of patients admitted during the period is 293.
- iii) *Physio Therapy*: 799 patients were benefitted by physiotherapy services during the period.
- iv) *Reconstructive Surgery*: Reconstructive surgery was performed on 41 patients.



**Research Activities:** The following Research studies were taken up during the reporting period:

- a) Role of pleomorphic organisms in skin smear and their relevance in management of leprosy.
- b) Sensitivity of M.Laprae to anti-leprosy chemotherapy - A Rapid in Y Vitro Test.
- c) Utility of Fluorescent Microscopy to study survival of M.Laprae.
- d) Fate of M.Laprae Suspension at Room temperature - An in - Vitro experiment.
- e) Histo-pathology of skin lesions after 6 months of pulse therapy in pauci Bacillary.
- f) *Pure-Neuritic Leprosy*: The extent of the problem with relation to diagnosis and treatment.
- g) Correlation of number of patches with BI and classification of Leprosy.
- h) Granuloma fraction with reference to extent of skin involvement.
- i) Heamatological profile of reactive and non-reactive phase of leprosy.
- j) Study of Epidemiology of deformities in leprosy.
- k) Study of comparativeness of different Health Education methods.

**Training Activities:**

- i) Number of Para Medical Workers Trained during 1990—119.
- ii) Number of Laboratory Technicians Trained during 1990—2.

iii) Number of Medical Officers trained during 1990—6

6.19.2 Reorientation training for all categories of National Leprosy Eradication Programme staff was undertaken during the year

		Budget		
		(Rs. in Lakhs)		
	Actuals	Budget	Revised	Proposed
	1989-90	Estimates	Estimates	Budget
		1990-91	1990-91	1991-92
PLAN	30.00	42.00	38.00	-
NON-PLAN	22.00	23.00	22.00	25.00

**6.20 Regional Leprosy Training and Research Institute, Gauripur**

6.20.1 The Regional Leprosy Training & Research Institute, Gauripur, was established during 1984 with an objective to provide quality curative services to complicated leprosy patients especially those with reactive and chronic ulcer. The Institute has a hospital facility of 50 indoor patients with separate provision for male and female patients. It also provides out patient services through daily leprosy clinics to the patients, living with their families in the near districts. Training courses for para medical wokergs, medical officers, re-orientation training courses for Laboratory Technicians, Skin Smear Technicians are imparted. The Institute is also conducting research in the field of leprosy to develop innovative approaches.

**i) Treatment Activities:**

- a) Total number of leprosy patients treated outdoor upto November, 1990 — 15115
- b) Total number of patients treated indoor — 132



ii) *Laboratory:*

a) Total Investigations done in clinical pathology laboratory upto November, 1990 — 68

b) Total investigations done in micro-biology laboratory upto Nov. 1990 — 3446

iii) *Research:*

One operational field research project is going on with the help of the WHO funds. Also a study on Dapsone refractory cases is going on.

iv) *Training:*

29 Para Medical Workers and 4 Smear Technicians were trained upto October, 1990. There was a target to train 40 Para Medical Workers, 10 Laboratory technicians and 20 N.M.S. during 1990-91.

**Budget Estimates**

	(Rs. in lakhs)		
	<i>Actuals</i>	<i>B.E.</i>	<i>R.E.</i>
<i>PLAN</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1990-91</i>
PLAN	24.00	18.00	30.00
NON PLAN	—	—	—

**6.21 Regional Leprosy Training & Research Institute, Aska**

6.21.1 The Regional Leprosy Training & Research Institute, Aska, came into existence on 2.10.1977 as a Subordinate office of Directorate General of Health Services with the main objective to impart training to medical and para-medical workers as well as orientation training to Laboratory Technicians, Physiotherapist-Health Educators etc. who are engaged in the field of eradication of leprosy. The Institute also provides free treatment to outdoor and indoor leprosy patients with a 50-bedded hospital. Research on various aspects of leprosy is also one of the activities of the Institute.

6.21.2 The Institute is manned by medical and para-medical staff headed by a Director for accomplishing the above jobs. During the year 1990-91 (upto Nov. 1990) as many as 2175 patients were treated in the outdoor department and 214 patients were admitted for indoor treatment during this period. 155 new cases were reported for treatment, 555 skin smear samples were examined during the year upto November, 1990. 557 medical and para-medical personnel working under National Leprosy Eradication Programme have been trained in the Institute since it was taken over by the Government.

6.21.3 The Institute has also completed research activities on i) Leprosy affected beggars and their role in infecting community; ii) Co-existence of leprosy and multiple *Nerofibrematous*; iii) *Microfilaria* in leprosy skin smear; and iv) Collagen dressing in leprosy ulcer.

6.21.4 A number of research activities on i) Planter ulcers—their characters, location in leprosy patients attending Regional Leprosy Training & Research Institute, Aska; ii) Study to find out knowledge, attitudes and practice among school teachers of Aska Block; iii) Socio economic factors of leprosy patients; iv) Stasis ulcer in leprosy; v) Multidrug therapy of R.L.T.R.I., Aska; and vi) Auto Haemotherapy in leprosy planter ulcers etc. are going on in this Institute.

6.21.5 During the year 1990-91, an amount of Rs. 24.00 lakh (both Plan & Non-Plan) was provided for the Institute against which an expenditure of Rs. 14.82 lakh was incurred upto November, 1990.

6.21.6 Further development of Regional Leprosy Training & Research Institute is contemplated during 8th Five year Plan period when it is proposed also to start a rehabilitation centre in the Institute for disabled and deformed patients.



## Budget Estimates

(Rs. in lakhs)				
	ACTUALS 1989-90	B.E. 1990-91	R.E. 1990-91	PROPOSED B.E. 1991-92
PLAN	7.00	5.00	4.50	—
NON PLAN	18.00	19.00	18.50	20.00

### 6.22 All India Institute of Physical Medicine and Rehabilitation, Bombay

6.22.1 The All India Institute of Physical Medicine and Rehabilitation, Bombay; was established as a pilot project in 1955 in the field of Rehabilitation Medicine in the whole South East Asia. Over the past 35 years since its inception, the Institute has been serving and rehabilitating the disabled segments of the country. The Government of India took over this Institute with effect from 1st October, 1961. It is a full-fledged centre in the field of rehabilitation with the function of teaching, training, research and production of mechanical and artificial appliances. The Institute has specialised medical services including a small hospital with a well-equipped operation theatre for re-constructive surgery.

6.22.2 The Departments where the staff members jointly look after the services as well as teaching and research programmes pertaining to the handicapped are: (1) Medical Rehabilitation (with 40-bedded hospital, Operation theatre etc.), (2) Rehabilitation Nursing, (3) Physiotherapy, (4) Occupational Therapy, (5) Speech Therapy, (6) Prosthetics and Orthotics (with Prosthetic Workshop), (7) Medical Social Work, (8) Vocational Guidance, Evaluation, Adjustment and Training (with Vocational Training Workshop), (9) Research and (10) Administration.

6.22.3 This Institute runs Under-graduate and Post-graduate Courses in Physiotherapy and Occupational Therapy and several post-graduate diploma courses in

various aspects of rehabilitation. The Institute has organised several camps in the interiors of the rural areas to offer on the spot treatment and guidance and where this was impracticable, to organise shifting of the patients for treatment at the Institute.

6.22.4 During the period under report, 12422 new cases and 9495 old patients were treated through special clinics and 21917 patients attended Out-patient Departments for various ailments. A total of 1619 operations (major and minor) were performed in the Institute. The Institute completed 13 projects during the year under report and had 15 continuing projects. The Institute had conducted 16 Workshops/Seminars during the year under report.

6.22.5 The Institute has both Plan and Non-Plan budget, During the year 1990-91, a budget provision of Rs. 81.50 lakh was made to the Institute under Non-Plan budget. The Plan budget of the Institute during the reported year was Rs. 20.00 lakh.

### 6.23 Rajkumari Amrit Kaur College of Nursing, New Delhi

6.23.1 *Introduction:* The Rajkumari Amrit Kaur College of Nursing, New Delhi was established in 1946 by the Union Ministry of Health and Family Welfare, Government of India, with the object of developing and demonstrating model programmes in Nursing Education. The college works in close association with health centres, hospitals, medical centres and allied agencies for teaching Under-graduates, Post-graduates, and students in Post-Certificate Diploma programme, and for Continuing education of nursing personnel. The College provides advisory and consultative services on nursing education matters to States, Union Territories and few foreign developing countries.



6.23.2 *Programmes of Study*: Programmes of Study conducted in the College are detailed below:

- (a) B.Sc. (Hons.) Nursing —an under-graduate programme of 4 years' duration of the University of Delhi.
- (b) Master of Nursing —a post-graduate programme of 2 years' duration of the University of Delhi.
- (c) M. Phil. in Nursing —a Post-Mater's programme of the University of Delhi of 1 years duration for full-time students and 2 years' duration for part-time students.
- (d) Diploma in Nursing Education and Administration —a Post-Certificate programme of 10 months' duration.
- (e) Continuing Education —Short-term courses for nurses in service.

### 6.23.3 Admission (Academic year 1990-91):

Course	Admitted	Joined	Dropped
B.Sc. (Hons.) Nursing	45 + 2	45	2 failures
Master of Nursing	15	15	—
Diploma in Nursing Education and Administration	50	45	5
M. Phil. in Nursing	4	4	—

6.23.3 (i) There were 251 students on the rolls. Admission was open to candidates from all parts of India. Six foreign students who fulfilled admission requirements were admitted this year. A total number of 104 students successfully completed programmes of study at basic and advanced levels.

6.23.4 *Funding*: The College is financed by this Ministry. Budget provision for 1990-91 was Rs. 10 lakh under Plan Scheme, and Rs. 60 lakh under Non-Plan Scheme. Special financial assistance is provided to students by Central Govern-

ment, State Government, and Government of India scholarships (Countess of Dufferin Fund).

6.23.5 *Library*: The College has a total collection of 15745 books. The College library subscribes to 38 national and international professional journals; 227 books were added to the College Library this year.

6.23.6 *Community Field Teaching and Services*: For the purpose of providing concrete, community based learning experience to students, the field teaching centre at Chhawla (District Najafgarh) is utilized. This Centre covers seven villages and is situated 25km. away from the College. Students of various educational programmes utilize this Centre. Staff and students provide comprehensive health care services to the rural population in collaboration with staff of Public Health Centre, Najafgarh. Special emphasis is given to MCH/Family Planning, Immunization; Nutrition Programmes, and other National Health Programmes like Malaria Eradication and Tuberculosis Control. Hostel accommodation is provided to staff and students.

### 6.23.7 Rural Community Health, Chhawla Health Services:

Mobile Clinic Report:	Cases treated	= 13027 (5668 + 7359)
	Cases referred	= 460
	Copper-T Insertions	= 50
	Tubectomies	= 6

### 6.23.8 Ante-natal Clinic Visits:

Ante-natal cases	= 494	Inj. TT	= 417
First visits	= 494	First dose	= 243
Re-visit	= 1492	Second dose	= 174
Inj. TT for injured cases = 214			
Total number of Toddlers	= 1333	First visit	= 493
Total number of Infants	= 878	Re-visit	= 3054
		First visit	= 202
		Re-visit	= 1676



T.B. Control Programme etc.=Referred about 10 cases of T.B. to Moti Nagar Chest Clinic & provided the treatment to the confirmed cases.

Ante-natal visit	1st visit	= 184
	Re-visit	= 750
Post-natal visits	1st visit	= 141
	Re-visit	= 650
Infants	Ist visit	= 142
	Re-visit	= 1150
Toddlers	Ist visit	= 199
	Re-visit	= 1100

6.23.10 Two health centres in South Delhi Zone of Municipal Corporation of Delhi offering Maternal and Child Health & Family Welfare Services were utilized for community health field teaching experience for students. Under the guidance of teaching staff, students identify needs, analyse the situations on the basis of data collected, and design and provide need-based comprehensive health care services to family and community.

**Medical Surgical Nursing,  
Paediatric Nursing.  
Obstetrical Nursing and  
Psychiatric Nursing.**

Psychiatric and Mental health nursing experience for B.Sc. (Hons.) Nursing students.

Sl. No.	Items	No.	Population covered
A) 1.	Group Projects Conducted	15	750
2.	Exhibitions	15	750
3.	Role Plays	9	450
4.	Puppet Shows	6	300
5.	Demonstrations	80	640
6.	Models Prepared	3	100
7.	Planned Group Health Education Sessions	199	230
8.	Research Projects on Detection of Anaemia in Adult Women in Chhawla Village & Tajpur village	1	Random sample of 420 mothers

Activity	No.	Population covered
—Health Education Session Planned	15	130
—M.P. Slides taken	180	180
—Chloroquine Tab. distributed	625	180
—Cases Detected	Nil	180

**6.23.15 Continuing Nursing Education:** Continuing education update courses were conducted for nursing personnel. Professional study programmes, educational



tours, and individualized programmes were planned and co-ordinated for visiting nurses, health professionals, and students from other States.

6.23.15(i) Consultative services were provided to agencies and organisations planning continuing education programmes for nursing personnel.

6.23.15(ii) Education and training in continuing education was provided to post-graduate students through formal college courses, including allied subjects and advanced nursing courses.

6.23.16 A reference and resource centre for literature on continuing education is maintained to assist resource staff engaged in conducting in-service education programme.

6.23.17. *International Collaboration:* The College is designated as a WHO Collaborating Centre for Nursing Development and works in collaboration with institutions of higher education in nursing and other related health organisations.

6.23.18 Education and training in research methodology was provided by the College teachers. Guidance was provided to 18 Post-Graduate and Post-Master's students undertaking studies relevant to nursing and health care.

## 6.24 Rural Health Training Centre, Najafgarh

6.24.1 *Introduction:* Rural Health Training Centre (RHTC) Najafgarh has three field activities which are Primary Health Care, Training and Field Studies.

6.24.2 Primary Health Care is carried out through a network of 3 Primary Health Centres e.g. 1) PHC, Najafgarh, 2) PHC, Ujwa, 3) PHC, Palam and sixteen sub-centres (PHC, Palam with four sub-centres has been placed under the technical control of Lady Hardinge Medical College under the Rural Health Scheme. Report

on PHC, Palam is sent to the Directorate/Ministry by L.H.M.C. authorities separately. This report is on two P.H.C.s Najafgarh and Ujwa and its 12 Sub-centres).

### i) Services Rendered

S.No.	Activities	Number/ attendance
1.	Indoor admission	682
2.	O.P.D. attendance	69160
3.	Emergency cases attended by PHC, Najafgarh excluding OPD	23164
4.	Antenatal cases registered with PHCs	897
5.	Antenatal cases registered with Sub-centres	3654
6.	Deliveries conducted at the PHCs	690
7.	Home deliveries conducted by PHC/Sub-centres Staff	688
8.	Home deliveries conducted by trained dais and registered at the Sub-centres.	2763
9.	Routine laboratory investigations	30992
10.	No. of pregnant women immunised against Tetanus.	3397
11.	No. of children immunised with DPT 3rd dose + Booster	1680
12.	No. of children immunised with O.P.V. 3rd dose + Booster.	1680
13.	No. of children immunised with measles vaccine	1680
14.	No. of children immunised with B.C.G.s	4691
15.	Vit. A prophylaxis (Total cases)	5076
16.	Medical Termination of Pregnancy without IUD	250
17.	IUD (including cases of MTP with IUD)	732
18.	Tubectomy	460
19.	Vasectomy	10
20.	Oral Pill (No. of cycles distributed)	180
21.	Conventional contraceptives (No. of pieces distributed)	57900



ii) *Health Education*

22.	No. of Film shows	150
23.	No. of Baby shows	2
24.	No. of composite programmes	8
25.	No. of Group talks (small group)	782
26.	No. of group talks (large group)	266
27.	No. of mothers' classes	36
28.	No. of exhibitions	2
29.	Posters displayed	500
30.	Booklets distributed	10752
31.	Puppet shows	2
32.	Magic shows	2
33.	Seminars	20
34.	No. of posters prepared	85
35.	No. of Qawali Programmes	1
36.	No. of demonstrations	96

iii) *Training*

S. No.	Staff Training	No. of Trainees
1.	Medical Interns under ROME Scheme (6 weeks)	137
2.	General Nursing, Public Health Nursing and ANM course students, trained in Community Health Nursing (4 weeks and 2 weeks)	377
3.	Female Multipurpose health workers trained at ANM training school of R.H.T.C.	40
4.	Promotional Course ANM to LHV (4 weeks) training in community Health.	21
5.	Nutritional Training:— In collaboration with the mobile and nutrition extension unit two courses were organised. One for Primary Health Care Workers and the other for Primary Health Care Supervisory Staff. The exposure consisted of exhibition, lectures and practical cooking demonstration.	100

iv) *Field Studies:*

Like 1989, Survey studies in relation to community health were conducted during 1990 in several villages. The finding would be brought out separately.

6.24.3 *Observation Visits:* Six teams from abroad and two teams from the National Institute of Health and Family Welfare, New Delhi visited R.H.T.C., Najafgarh during the year 1990.

6.25 *Lady Reading School, Delhi*

6.25.1 Lady Reading Health School has the distinction of being the pioneer institution and first of its kind for training of Health Visitors. It was established in 1918 under the Countess of Dufferin Fund and became a Subordinate Office of Directorate General of Health Services in April, 1952. It aims to provide training facilities to various categories of nursing personnel and also provides MCH services through the attached Ram Chand Lohia Infant Welfare Centre.

6.25.2 This Institution is conducting the following courses at present:

(i) *Diploma in Public Health Nursing:*

This course is of 10 months duration which starts on the 15th July each year with total admission capacity of 40. Twenty-nine students were enrolled in current year.

(ii) *Certificate Course for Health Workers (Female) under Multi-purpose Workers Scheme:*

This course is of six months duration starting on 1st January and 1st July every year. The admission capacity for this course is 15 in each session. 21 students were enrolled in current year.

(iii) *Multipurpose Health Workers' Training (Female) or Auxiliary Nurse cum Midwife course under 10+2 Vocational Scheme:*

6.25.3 This course has been running since 1986. From this year Government of India has decided to bring this course under vocational scheme at 10+2 level in the institutions/schools affiliated to Central



Board of Secondary Education. The duration of the Course will be of two years. At the end of the training, candidates will be awarded Secondary School Certificate. Admission capacity for this course is 20 per year. The new course has been started in this year at this institution.

6.25.4 Students are having their field experience in health centres, different hospitals and institutions in Delhi. Public Health Nursing students are also having experience at Gandhigram Institute of Rural Health & Family Welfare Trust, Tamil Nadu.

6.25.5 The Ram Chand Lohia Infant Welfare Centre attached to this institution served two-fold purpose viz MCH Services including domiciliary midwifery services and immunisation to the population of over 45,000 and training to the students of this institution.

6.25.6 Public Health students from Ranchi and T.B. Health Visitors continued to come for their practical training, orientation groups from STD Centre, Safdarjung Hospital, New Delhi and other individuals including foreign visitors came for observation of the activities of the institution.

6.25.7 Total budget for the institution and Family Welfare staff was Rs. 21,47,000/- this year.

#### **6.26 National Institute of Communicable Diseases, Delhi**

6.26.1 *Objectives:* The Institute was established in July, 1963 by expanding and reorganising the activities of the erstwhile Malaria Institute of India with the following objectives:

(i) To undertake basic and applied research on all aspects of Communicable Diseases.

(ii) To provide guidelines in the planning of epidemiological services; organise field investigations of communicable disease outbreaks;

and suggest control measures. Besides, the Institute provides referral and evaluation services for different diseases, immunising agents, drugs and pesticides and undertakes quality control of BCG vaccine.

(iii) To organize training programmes at the National and International level for raising trained man-power for programme management and augmentation of research.

6.26.2 *Organization:* The above objectives of the Institute are being achieved by carrying out activities through its seven divisions namely, Biochemistry, Epidemiology, Helminthology, Medical Entomology and Vector Control, Microbiology, Training & Malariology and Zoonosis. Besides, the Institute has eight field stations in different parts of the country viz. South India Branch, Coonoor (Tamil Nadu), Malaria Research Station, Jagdalpur (Madhya Pradesh), Kala-azar Unit, Patna (Bihar), Field Practice Unit, Alwar (Rajasthan), Plague Surveillance Unit, Bangalore (Karnataka) and three Regional Filaria Research & Training Centres each at Calicut (Kerala), Rajamundry (Andhra Pradesh) and Varanasi (Uttar Pradesh).

6.26.2(i) The field stations undertake specific epidemiological studies and assist in the training programmes.

6.26.2 (ii) The Institute has been rendering yeomen's service in the development of trained manpower in respect of various communicable diseases and control measures thereof by organizing various courses viz. Malaria, Malaria Entomology, Epidemiology, Diarrhoeal Diseases, AIDS, Expanded Programme on Immunisation etc. Scientists in these fields from India and abroad are brought together to get acquainted with recent developments by organizing workshops/seminars funded by WHO and UNICEF as well as their respective National Government.



6.26.3 *Biochemistry Division*: The Division is engaged in biochemical, immunological and other related aspects of various communicable diseases and providing laboratory support to their diagnosis, control and prevention:

(i) Attempts are being made to isolate most potent and stable antigens of malaria & leishmania from the blood, liver and spleen tissues of various laboratory animals which can further be used in immuno-diagnosis and sero-epidemiological studies.

(ii) Different strains of *P. falciparum* & *I. donovani* and myeloma cell lines are being maintained for lymphocyte hybridoma technique and attempts are being made to raise monoclonal antibodies against some of the potent antigens.

(iii) Genetic differentiation among different species and even different strains of some species of Plasmodia & Leishmania are being carried out through isoenzyme profile studies.

(iv) Earlier studies in experimental animals revealed that pesticides suppress both cell-mediated and humoral type of immuno-responses. Studies are being planned to observe the effects of different pesticides on various vital organs and tissues of experimental animals with different doses.

(v) Blood biochemistry including immunological, haematological, liver function, kidney function & thyroid function tests etc. are being carried out routinely under medical biochemistry services.

(vi) Public health services like chemical analysis of water, estimation of iodine content in common salt, G6PD deficiency test and estimation of base contents of anti-malarial drugs are also being carried out.

(vii) A workshop on Immunochemistry with special reference to parasitic dis-

eases was organized in May, 1990 for medical and para-medical officials.

#### 6.26.4 *Epidemiology Division*:

##### *I. Epidemic investigations:*

(i) Cholera cases in various areas of Delhi were investigated during May 1990.

(ii) Following epidemic investigations were undertaken:

(a) Meningitis in Madhya Pradesh and Orissa.

(b) Viral Fever investigations in Rajasthan and Gujarat.

(c) Kala-azar in Patna & Vaishali districts of Bihar.

(d) Viral Hepatitis in Bhubaneswar, Orissa and Rewa District (MP).

(e) Salmonella contamination of eggs supplied in Delhi, Gurgaon (Haryana).

(f) Japanese encephalitis investigations in U.P., Assam, Andhra Pradesh and Orissa.

(iii) Drinking water samples from different parts of Delhi were investigated for quality testing and bacteriological standard.

##### 6.26.4(II) *Surveillance/monitoring of epidemic prone communicable diseases:*

6.26.4(II)(a) The division acts as nodal point for sentinel surveillance and monitoring for various communicable diseases. Monthly morbidity and mortality rate for Japanese Encephalitis, Viral Hepatitis, Gastroenteritis, Cholera, Poliomyelitis, Diphtheria, Tetanus, Measles, Whooping Cough, Meningitis from 60 sentinel centres selected from 28 States/ Union Territories of the country are being collected.

6.26.4(II)(b) For sentinel surveillance the



morbidity & mortality data and sera samples are being collected for Meringitis, Acute Poliomyelitis, Jaundice & V.D.R.L. from different hospitals and CGHS dispensaries for rapid consolidation, analysis and timely feed back.

#### 6.26.4(III) *Field Survey:*

6.26.4(III)(i) Field studies were conducted to study the pattern of morbidity and mortality with reference to diarrhoeal diseases and ARI etc. in Rajasthan and Delhi. Studies regarding the vaccine efficacy in Measles, Poliomyelitis were done in Delhi and adjoining areas.

6.26.4(III)(ii) Field studies on AIDS, Japanese encephalitis, Universal Immunization Programme in Delhi and Malaria stratification in Ghaziabad, U.P. were carried out.

#### 6.26.4(IV) *Training Programmes and Workshop:*

(i) A 3 month course on Epidemiology for District Health Officers of various States of India, Nepal and Sri Lanka was conducted w.e.f. 22.12.89 to 20.2.90.

(ii) A symposium on AIDS surveillance was conducted on 24th and 25th April, 1990.

(iii) A WHO Workshop to prepare modules pertaining to various diseases was conducted on 14th and 15th May, 1990.

(iv) A workshop on Kala-azar was organized at Varanasi from 22nd to 23rd June, 1990.

(v) A symposium on Universal Immunization Programme was organized from 27th to 31st August, 1990.

(vi) A National Symposium on Gastroenteritis with special reference to Cholera was organized from 9th to 10th August, 1990.

(vii) Under the Project "Development of Epidemiological Services and Lab. Sup-

port", a long-term (9 months) field epidemiology course started in December, 1990. A high level delegation recently visited C.D.C., Atlanta, and other Institutions of U.S.A. to finalise the modalities regarding the training programme, supply of equipment and technical specialised services.

6.26.5 *Helminthology Division:* Broad activities carried out by the Division during the year are given below:

#### (A) *Filariasis:*

(i) The Division conducts research and training in various aspects of filariasis through its three Regional Filaria Training & Research Centres at Calicut (Kerala), Rajahmundry (A.P.) and Varanasi (U.P.). Currently seventeen projects are in progress in the fields of Epidemiology, Immunology, Chemotherapy, Entomology, Operational, Socio-medical and Health Educational aspects of filariasis.

(ii) Filariasis surveys were carried out in Silvassa and Chamba.

(iii) A 20 working days training course for Filaria Inspectors and 30 working days training course for Medical Officers/Biologists were conducted at RFT&RCs, Calicut, Rajahmundry and Varanasi and a 5 working day training course for Sr. Medical/Non-medical Administrators was conducted at RFT&RC, Rajahmundry.

(iv) The facilities of day/night clinics are being provided at RFT&RCs, Calicut, Rajahmundry and Varanasi and treatment is given to all.

(v) Six hundred seventy five infected blood slides of *D. immitis* larvae have been supplied to various Medical Institutions for teaching purposes.

#### (B) *Intestinal Parasitic Infections:*

Surveys for intestinal parasites were conducted at Aizawl, Mizoram and mandi, H.P.



(C) Routine Activities of the Division and its three Regional Centres:

(i) Strain Maintenance: Filaria animal strains of *D. repens*, *I. Carnii*, *B. ceylonensis* and *B. malayi* are being maintained.

(ii) Maintenance of Arthropod Vectors: Colonies of *C. quinquefasciatus aedes aegypti*, *ernithonyssus baseti* are being maintained. Colonies of experimental animals like white rats, birds, rabbits and dogs are also being maintained regularly.

(iii) Cross checking of blood smears from various NFCP Units: Nine hundred and sixty eight blood smears received for cross-checking from various NFCP units of the country during the year.

6.26.6 Guineaworm Eradication Programme in India—Strategy: Current Situation & Achievements during 1990: The National Institute of Communicable Diseases, Delhi is the nodal point for planning, coordination and evaluation of GWEP in the country. The programme is implemented by the guineaworm endemic area's State Health Directorate through Primary Health Centres.

6.26.6(i) Guineaworm Eradication Strategy: The programme envisages the following integrated strategies:

a) Well planned house to house active guineaworm case search operations during the months of April, June and December, every year, in all the guineaworm endemic States and districts, while maintaining an inter-search surveillance.

b) The timely management of patients by regular bandaging of guineaworm ulcers and complications.

c) identification and mapping/recording of unsafe drinking water sources and tempephos application to these sources monthly from February to June & one in two months from July-December (i.e. 8

times/year) in all the guineaworm endemic villages.

d) Provision and maintenance of safe drinking water supply including conversion of priority unsafe water sources into safe ones, in all guineaworm affected villages.

e) Intensive and extensive guineaworm health education for mass community awareness and their involvement in the programme.

f) Trained manpower development of all levels of programme implementation, viz. District Health Offices, Medical Officers, Public Health Engineers, Mass Media-Health Education officials and para-medical workers; with the help of teaching modules and aids developed by NICD, Delhi. The operational research is carried out to improve the efficiency and effectiveness of the programme. The GWEP has set its target as zero guineaworm incidence in the country by 1991.

6.26.6(ii) Current Guineaworm Diseases Situation in the Country: The Guineaworm Eradication Programme continued to be implemented in the endemic States of the country during 1990. Three active case searches were carried out in April, June and December. 4,798 cases were reported from six affected States as follows:—

State	Number of affected villages	Number of cases in 1990
Rajasthan	1565	3376
Karnataka	249	634
Madhya Pradesh	485	333
Andhra Pradesh	88	224
Maharashtra	190	209
Gujarat	15	22
TOTAL	2592	4798

6.26.6(iii) Compared to 1989; the number



of affected villages declined by about 30% from 3638 to 2592 and the number of cases declined by about 45% from 7881 to 4798. Rajasthan, continues to be the most problematic guineaworm endemic State. The following activities were also carried out:—

a) During the year, 4500 litres of temephos were distributed to the guineaworm endemic states;

b) To promote personal prophylaxis among the community about 50,000 strainers were also distributed;

c) Ten Epidemiological Surveillance Teams were deployed in the affected States; and

d) Programme was reviewed in the 12th Task Force meeting in Delhi in January 1990 and at the higher level in the D.G.H.S. and Ministry of Health and Family Welfare. The GWEP was represented at two International Conferences during 1990.

#### 6.26.7 Medical Entomology & Vector Control Division:

##### 6.26.7(i) Studies on Bioecology of Disease Vectors:

6.26.7(i)(a) *Identification of arthropod blood meal by gel diffusion technique:* Studies were undertaken on the feeding behaviour of different vector and non-vector species of mosquitoes collected from Delhi and around.

6.26.7(i)(b) *Feeding behaviour of mosquitoes from Jagdalpur, District Bastar (M.P.):* A total of 677 mosquitoes collected by light traps from malaria endemic areas of Jagdalpur, Distt. Bastar (M.P.) were processed by gel-diffusion technique to know their feeding preferences.

##### 6.26.7(ii) Taxonomic studies on mosquitoes and sandflies:

(a) *Taxonomic studies:* A checklist of mosquitoes present in NICD collection for various sub-families of culicidae from India/sub-region is being prepared. The checklist includes about 340 species belonging to 3 sub-families viz. *Anophelinae*, *Culicinae* and *Toxorhynchitinae*.

(b) *Biometrical variation in Culex Quinquefasciatus Mosquito:* *Culex Quinquefasciatus* population from a permanent breeding habitat in North Delhi was monitored for one year for variation in the DV/D of the male terminalia.

(c) *Studies on the sibling species of Anopheles Hyrcanus Group of the Indian Sub-continent population:* N.I.C.D. collection of *A. hyrcanus* representing the Indian Sub-continent including Federated Malay State, Burma and Thailand was screened for morphological characteristics of adults.

(d) *Morphometric studies on sandfly vector:* Studies on morphometric characteristics of immature stages of *phlebotomus argentipes*, *P. papatasi* and *sergentomyia babu* are being continued.

(e) *Comparative study of field sampling methods for sandflies:* Studies were carried out in village Basantpur to evaluate the comparative efficacy of various sandfly collecting devices. Hand collection method was found to be the most effective followed by sticky trap collection, pyrethrum catch and bait collection. None of the soil samples processed for sandflies larvae was found to be positive.

(f) *Rodent ectoparasitic association in diverse biotopes of India:* Examination of mesastigmated mite population retrieved from *Rattus norvegicus*, *R. blanfordi* and *B. bengalensis* from various biotopes of Varanasi and Mirzapur (U.P.) revealed the presence of mite *laelaps nutlali*. This species was predominantly found on *B.*



*bengalensis* and is known to be predaceous on the larvae of fleas. It was also observed that fleas were totally absent on *B. bengalensis* population but were present on the *Rattus* sp.

(g) *Survey of Aedes mosquitoes*: *Aedes* surveys were carried out in Rani Jhansi Road, Delhi, Chittranjan Park, New Delhi, and NICD campus, Delhi, to determine the prevalence of *Aedes aegypti*.

#### 6.26.7(iii) *Vector Control*:

a) *Studies on the development of deltamethrin (K-Othrin) resistance in Culex Quinquefasciatus Mosquito*: Studies were carried out on the development of Deltamethrin (K-ot-hrin) resistance in *Culex quinquefasciatus*. The observation made upto 28th generation revealed that development of resistance is slow in this species.

b) *Evaluation of Cyclopsivorous properties of Fish*: Studies were undertaken to evaluate the cyclopsivorous properties of the two mosquito-larvivorous fishes viz. *Gambusia Affinis* and *Poecilia Reticulata*. The study reveals that *G. affinis* can effectively be used for the control of cyclops-vector of Guineaworm disease in endemic areas.

c) *Studies on susceptibility status of vector mosquitoes*: Susceptibility test on various species of *Anopheles* revealed that *A. culicifacies*, *A. subpictus* and *A. annularis* were resistant to DDT and DLN and susceptible to Malathion. *Anopheles stephensi* was found to be resistant to DDT and susceptible to Dieldrin and Malathion.

(d) *Laboratory bioassay of insecticides*: Various insecticides formulations received from various agencies were evaluated to determine their bioefficacy/residual toxicity against

various arthropods of medical importance.

6.26.8 *Microbiology Division*: The Microbiology Division undertakes the following activities in applied research service and laboratory training:

#### (A) *Research/Surveillance*:

(i) *BCG/Vaccine Testing*: BCG Vaccine produced at Madras is tested in the division before it is released for use.

(ii) *National Viral Hepatitis Surveillance*: The division co-ordinates the national viral hepatitis surveillance programme on behalf of DGHS. This is done through 13 Regional Viral hepatitis Surveillance Centres situated in different parts of the country. The diagnostic support to outbreak investigations is also provided.

(iii) *AIDS Reference Centre*: The division is one of 4 AIDS referral centres in the country and provides screening, referral and diagnostic facilities in addition to the laboratory training programme.

(iv) *Studies on ARI*: Causes of ARI, both bacterial and viral are studied and further characterization done.

(v) *Diagnostic support of Meningitis*: With particular emphasis on meningococcal meningitis which has the potential of causing outbreaks. The division stores meningococcal vaccine stores meningococcal vaccine on behalf of DGHS and distributes it to all the States/UTs.

(vi) *Monitoring of Diphtheria*: Culture proven cases of Diphtheria obtained from cases admitted in I.D. Hospital, Delhi, is done in an on-going method.

(vii) *Monitoring of Cholera/Gastroenteritis*: In collaboration with I.D. Hospital, Delhi, the monitoring of cholera/GE is done in Delhi. Bacteriological examination of water is done to find out its quality.



(viii) *Studies on newer enteropathogens/ newer techniques*: Such as *Comphylobacter*, *Versinin enterocolitica* etc. and DNA probes and plasmid -profile studies is undertaken.

(ix) *Potency testing of OPV and Measles Vaccine*: As a support to UIP, the potency of field lifted samples of OPV is done to monitor the quality of cold chain.

(x) *Enteroviruses*: Surveillance of poliomyelitis is done in collaboration with KSCH where 75% of the cases are admitted.

(xi) *Teratogenic organism*: The studies are undertaken on Rubella and CMV infections, since this has applied importance.

(xii) *Mycotic Diseases*: The studies are undertaken on superficial and deep mycotic diseases and also on opportunistic pathogens.

#### (B) Workshops/Training Courses:

(i) The faculty participated actively in the 3 months Epidemiology Course conducted by NICD.

(ii) Conducted a 2-day meeting of the Programme Officers of various Regional Viral Hepatitis Surveillance Centres at NICD in June, 1989.

(iii) Conducted a 4-day Workshop for the States/UTs for "Investigation of meningococcal meningitis outbreaks with special emphasis on laboratory diagnosis".

#### 6.26.9 Training and Malariology Division:

The important activities undertaken by the Division are as follows:—

##### (A) Regular Courses:

A six week course in Malariology was conducted from 6.8.90 to 14.9.90. It was attended by 19 participants.

In addition, short term training courses/seminars and workshops were also conducted in co-ordination with other divisions of the institute.

##### (B) Strain Maintenance:

The following strains of plasmodia were maintained in animal and bird models for teaching and research purposes.

##### a) Non-resistance Strains:

- i) *P. cynomolgi bastianelli* In Rhesus monkeys
- ii) *P. Knowlesi*
- iii) *P. berghei* in albino rats.
- iv) *P. gallinaceum* in fowls

##### b) Resistance strain:

*P. berghei* — resistant to chloroquine.

##### (C) Precipitin Tests:

These tests were carried out on blood meal specimens collected to determine the source of blood ingested by female mosquitoes.

##### (D) Visitors:

Six WHO fellows from Afghanistan, Bangladesh and Sri Lanka visited this Institute for a short training course.

#### 6.26.10 Zoonosis Division:

a) *Research*: Currently the studies are being carried out on various zoonotic diseases viz. Salmonellosis, Brucellosis, Hydatidosis, Plague, Rabies, Visceral Leishmaniasis, Toxoplasmosis and Arboviruses.

6.26.10. (i) *Kala-Azar: Seroepidemiological studies*: Sera collected from Bihar are being tested for the presence of anti-leishmanial anti-bodies by IIF and ELISA tests.

6.26.10. (i) (a) *Diagnosis of Kala-azar in Delhi*: Diagnostic services are provided to



all hospitals of Delhi. Diagnosis is made by bone-marrow smear examination, promastigote culture and serological tests.

6.26.10. (i) (b) Regular courses are being held at NICD, Delhi as well as in Patna for the training of medical and para-medical personnel.

6.26.10 (ii) *Toxoplasmosis*: *Toxoplasma gondii* strain is being maintained in albino mice. Sero diagnostic facilities are provided to all the hospitals. Indirect Immunofluorescence test is used for detection of *Toxoplasma* anti-bodies in patients serum. DOT ELISA is being standardized.

6.26.10 (iii) *Plague*:

a) *Serological Surveillance*: Rodent serum samples from Karnataka, Andhra Pradesh and Tamil Nadu are tested by passive haemagglutination test for the presence of plague anti-bodies.

b) *Entomological Surveillance* is being carried out for identification of fleas/ flea index/ susceptibility status in endemic areas throughout the year.

c) *Bacteriological Surveillance*: Wild rodents are being screened for the presence of *Yersinia Psudotuberculosis* infection.

d) *Rat Surveillance*: Dead as well as live rodents are being screened for bacteriological evidence of plague.

e) *Epidemiological Surveillance* is being carried out in endemic areas particularly in Karnataka, Tamil Nadu and Andhra Pradesh.

f) Regular courses are being conducted for training of medical as well as para-medical staff.

6.26.10. (iv) *Rabies*:

(a) *Diagnosis of Rabies in Animals*: Post-mortem diagnosis of rabies in animals is

provided by examination of brain specimens by Seller's Straining, Fluorescent Anti-body Test and Mouse Inoculation.

(b) *Studies on suspected Hydrophobia Cases*: Corneal smears from suspected hydrophobia cases are being tested by FAT saliva and CSF by mouse inoculation test. Samples are obtained from ID Hospital, AIIMS, Safdarjang Hospital.

(c) *Assessment of Antirabies Antibodies*: Post immunization sera from humans and animals are being tested for the anti-rabies antibody titre by CIEP. For sero-conversion studies serum samples are being obtained from all MCD Clinics, hospitals, NDMC Veterinary Hospital, MCD Veterinary Hospital and private veterinary clinics.

6.26.10. (iv) (i) *Consultation regarding Antirabies Immunization*: Expert advice is rendered to persons on post-exposure anti-rabies treatment.

6.26.10. (iv) (ii) *Rabies Control Programme*: The Division coordinates the activities of the Rabies Control Programme in the country with the Department of Agriculture and in Delhi with the Municipal Corporation of Delhi.

6.26.10. (v) *Arboviruses*:

(a) *Serodiagnosis*: Serological diagnosis using Haemagglutination Inhibition Test is performed on serum and CSF samples. Samples are being obtained from all major Hospitals.

6.26.10 (v) (b) *Maintenance of Cell Lines*: Continuous cell lines of simian origin i.e. Vero and LLC MK2 are being maintained routinely for propagation of JE & WN viruses. Attempts are being made to propagate JE and WN viruses in cell lines as well in suckling mice. The assessment of the virus titres of these harvests from infected cells and suckling mice is assessed by plaque assay in vero cells and serologically by direct fluorescent anti-



body test and haemagglutination test.

6.26.10. (vi) *Brucellosis and Salmonellosis*: Serological investigations are being performed on sera samples received from different hospitals (Medical and Veterinary).

6.26.10. (vii) *Food Borne Infections*: Studies are being carried out on the following food-borne infections:

(a) *Hydatidosis*: The slaughtered sheep are being examined for the presence of hydatidcyst. Serological investigations are being carried out for the presence of antibodies against *E. granulosus*. Samples are being collected from slaughter House, Delhi.

(b) *Salmonellosis*: Serological surveillance is being carried out to find out the present status of the infection. Samples are collected from animals and human beings from different places in and around Delhi.

(c) *Rickettsial infections*: Antibodies against rickettsial are detected, using IFA test in patients with pyrexia of unknown origin.

(d) *Leptospirosis*: ELISA test has been standardized for serology of leptospirosis. Blood samples from patients with jaundice are tested for leptospire antibodies.

#### 6.26.11 *Training Activities*:

- i) Workshop on Laboratory Techniques in Rabies—January, 1990.
- ii) Workshop on Control of Visceral Leishmaniasis at Calcutta—February, 1990.
- iii) Workshop on Rabies Vaccine at Manipal—March, 1990.
- iv) Workshop on Plague, Leptospirosis & Snake-bite at Manali—March, 1990.
- v) Workshop on Plague and other rodent borne diseases at Bangalore—May, 1990.

vi) National Course on Zoonosis at NICD, Delhi—August, 1990.

#### 6.27. Central Research Institute, Kasauli

6.27.1 The Central Research Institute, Kasauli, established in 1905, has completed 85 years of unique service to the nation and over the years has developed into a prestigious centre for production and quality control of immunobiological, research on medical and public health problems. The present functions of the Institute can be broadly grouped in four heads as under:—

1. Production of Immunobiologicals;
2. Standardization and Quality Control of Immunobiologicals;
3. Research Activities; and
4. Teaching and Training Programme.

6.27.2 *Production of Immunobiologicals*: In continuation of the activities started in the early formative years of the Institute, production of vaccines like sheep brain ARV (Now BPL, inactivated instead of earlier carbolised one), anti-typhoid and anti-cholera vaccines, has continued in very larger amounts.

6.27.2. (i) The anti-sera produced in horses for prophylactic and therapeutic purposes manufactured at this Institute include anti-rabic Serum, polyvalent Anti Snake Venom Serum against 4 commonly known poisonous snakes, Anti-Tetanus and Anti-Diphtheria Sera. The Institute has been successful in preparing and standardizing the experimental batch of Anti Scorpion Venom Serum in sheep for use as and when required.

6.27.2. (ii) The Institute was the first to introduce large scale fermentor technology for production of DPT products and increasing the output to meet the Institute's share in the success of national immunization programmes. The production capacity in respect of DPT Vaccine is



proposed to be expanded during the 8th Five Year Plan. This is the only institute in the country which has been identified for the production of Japanese Encephalitis vaccine and yellow Fever Vaccine. As regards yellow Fever Vaccines, production and supply is however, controlled as per the demand. The Institute has also undertaken R&D efforts in the field of measles immunization during the

last 10 years. Simultaneously the Institute has also been involved in the testing of different batches of vaccines being imported and used in national programme.

6.27.2 (iii) During the year 1988-89 and 1989-90 (upto 31/10/1990), the Institute supplied the following quantities of vaccines and sera:

Name of the products	Quantity Supplied	
	During 1989-90	During 1990-91 upto 31st October, 1990.
1. Triple Vaccine (DPT)	2,06,80,420 doses	1,05,34,220 doses
2. Diphtheria Tetanus (DT Vaccine)	1,19,54,620 "	84,08,120 "
3. Purified Tetanus Toxoid	2,29,26,480 "	97,90,300 "
4. Typhoid Para 'A' (Bivalent)	18,21,240 "	9,11,100 "
5. Typhoid Para A.K.D. (Bivo)	35,200 "	12,760 "
6. T.A. Children	3,07,220 "	1,81,780 "
7. Cholera Vaccine	92,69,700 ml	16,85,750 ml
8. Antirabic Vaccine (H)	62,48,715 ml	31,36,535 ml
9. Anti rabic Serum	59,250 ml	42,535 ml
10. A.R.V. (Dog)	2,895 ml	1,260 ml
11. Antisnake Venom Serum (dry)	4,06,710 ml	1,89,185 ml
12. Tetanus Antitoxin 1500 Unit	6,054 vials	3,664 vials
13. Tetanus Antitoxin 10,000 ml	10,395 vials	2,716 vials
14. Diphtheria Antitoxin 10,000 Unit	14,586 vials	4,401 vials
15. Normal Horse Serum	42,620 ml	16,720 ml
16. J.E. Vaccine	14,39,945 doses	5,15,770 doses
17. Yellow Fever Vaccine	21,220 doses	14,778 doses
18. Diagnostic Antigen	2,92,030 ml	1,80,550 ml

6.27.3 *Quality Control of Immunobiologicals*: The Institute is a standard bearer and trend-setter for the production techniques and quality control of Immunobiologicals for which it is also the Central Government Laboratory under the Drugs and Cosmetics Act for the country as a whole. The Central Government Laboratory for testing of Immunobiologicals works in close collabora-

tion with the Biological Standardization and Quality Control (B.S.Q.C.) division of the Institute. The primary functions of this Central Drugs Laboratory are:—

i) Testing of Immunobiologicals under the Drugs & Cosmetics Act of the country.

ii) Supply of National Reference Stan-



dards to manufacturing and testing units in the country.

- iii) Streamlining the quality of vaccines used under EUI.

6.27.3 (i) The B.S. & Q.C. Division of the Institute is not only responsible for independently testing the Immunobiologicals produced in the Institute but also for testing the same produced by all the manufacturing Institutes in the country and even for those which are imported in the country.

6.27.3. (ii) The Division continued to discharge its function in respect of testing of biologicals, samples received from Drugs Control Authorities throughout the country as well as the samples of products manufactured in the Institute. A total of 457 samples were tested under Drugs and Cosmetics Act (1940) during the period. 1012 batches of different vaccines and anti-toxine manufactured by the Central Research Institute, Kasauli were tested for sterility, abnormal toxicity, PH and identity tests.

6.27.3. (iii) Polio Vaccine testing unit was transferred from NICD to this Institute in 1979 and since then it has creditably and efficiently tested not only the imported batches of vaccine but also the trial batches manufactured by Haffkine Institute, Bombay, at various stages. Over the years the testing has increased considerably as more and more emphasis is being laid on the quality of the products to be used in the International Immunization Programmes as also in the other spheres in the country.

6.27.4 *Research and Development Activities:* R&D efforts have been initiated for adaptation of rabies virus strain to continuous cell lines like BHK-21 and vero cells. The initial results obtained appear to be very convincing and the work on these lines is expected to be continued during the next few years with the ultimate aim to produce a Tissue Culture

Rabies Vaccine in vero cells for human use in the next five year plan period.

6.27.4 (i) R&D efforts already being continued in regard to measles vaccine with a view to finally aim to indigenise production and for strengthening quality control and testing activities will be continued in the coming years.

6.27.4 (ii) Apart from research, production of newer vaccine like OPV and expansion of presently produced vaccines is in progress.

6.27.4 (iii) Depending on the requirements of DPT Group of vaccines in the next plan period, it is proposed to expand the production activities of these vaccines.

6.27.5 *Teaching/Training Activities:* The Institute is conducting regular courses leading to B.Sc., M. Phil and Ph.D. in Microbiology in accordance with the statutes/regulations of the Himachal Pradesh University. At present there are 40 students on roll in these courses.

6.27.5 (i) In addition, it conducts group educational activities in the form of refresher programmes for medical, veterinary and other scientists working in different Institutions in India. 39 (4 from WHO) Officers/officials had undergone different training programmes at this Institute during the period under report.

## 6.28 Pasteur Institute of India, Coonoor

6.28.1 The Pasteur Institute of India, Coonoor, Nilgiris is engaged in conducting research in rabies, influenza and other respiratory virus infections etc. and in the production of life-saving Antirabies and DPT group of vaccines.

6.28.2 *Antirabies Vaccine:* The Annual production of antirabies vaccine undertaken, out of its own resources, is around 48.00 lakh ml. The Institute had supplied during 1989-90, 43.80 lakh ml. of Antirabies vaccine for treatment of human



patients and 3.75 lakh ml. for the treatment of animals. During 1990-91, the Institute had supplied 22.00 lakh ml. of Antirabies vaccine (till 24th October, 1990) to various States, viz., Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Orissa, Maharashtra, Madhya Pradesh, Assam, Pondicherry, Uttar Pradesh, Meghalaya, Bhutan, Bihar, Sikkim as well as to the World Health Organization for supplies to Nepal.

6.28.2 (i) With the help of WHO/UNDP aid, the Institute has taken up the Pilot Project for production of Tissue Culture Antirabies vaccine and the relevant studies in this regard have been completed.

6.28.2 (ii) It is expected that this Tissue Culture (VERO) Rabies Vaccine will be made available for human pre-exposure and simulated post-exposure treatment in our country during the end of 1990-91. The Ministry of Health and Family Welfare, had allocated funds to the tune of Rs. 96.33 lakh in the VII Five Year Plan for development and production of this vaccine.

6.28.2 (iii) Substantial progress has been made in the various aspects of production of Vero Tissue Culture Rabies Vaccine. The bulk of the vaccine has been concentrated and are undergoing purification. Some of the equipments for purification of the vaccine have been supplied by the World Health Organisation as aid to this Institute. Some more equipment is expected to be received soon which will enable the final purification of the vaccine. In the meanwhile, the project has succeeded in producing the Tissue Culture (Absorbed) Rabies Vaccine for prophylaxis in dogs against rabies.

6.28.3 *DTP Group of Vaccines*: Since 1977, the Institute has been implementing the Central Scheme of production of DTP group of vaccines for the National Expanded Programme on Immunization

with 100% Grant-in-aid from the Government of India.

6.28.3 (i) The proposal for the expansion of the existing DTP vaccine production submitted for inclusion in the VII Five Year Plan was approved by the Ministry of Health and Family Welfare. Accordingly, the Institute had supplied during 1988-89, the full target of 135.00 lakh doses of DTP vaccine and 90.90 lakh doses each of DT and TT vaccine for the programme. During the year 1989-90, the Institute had supplied 144.95 lakh doses of DTP vaccine, 81.76 lakh doses of DT vaccine and 94.64 lakh doses of TT vaccine to the various States for the EPI Programme.

6.28.3 (ii) During the year 1990-91, the Institute has so far supplied (till 24th October, 1990) 57.45 lakh doses of DPT vaccine, 57.66 lakh doses of DT and 53.78 lakh doses of TT vaccine to the various States for the EPI Programme.

6.28.4 *New Activities*: Testing of Oral Polio Vaccine and Measles Vaccine from the field.

6.28.4 (i) Since 1988, the newer activity has been established in the Quality Control Division of the Institute for testing Oral Polio Vaccine and Measles Vaccine samples from the field for their potency to preserve the efficacy of cold chain maintenance in vaccine distribution. Accordingly, samples were received from Tamil Nadu, Kerala and Karnataka during 1989-90. A total number of 797 samples of Oral Polio Vaccine and 32 samples of Measles Vaccine were received during the period January 1990-September, 1990 from the various district depots as well as from Primary Health Centres and were tested. The reports are periodically sent to both the State and Central Government EPI Officers for their monitoring purposes.



## **6.29 Central Institute of Psychiatry, Ranchi**

6.29.1 The Hospital for Mental Diseases, Ranchi, founded in 1918 was renamed as the Central Institute of Psychiatry, Ranchi in 1977. The Institute is directly under the control of the Directorate General of Health Services and caters to the needs of people from all over India and also the two neighbouring countries viz. Nepal and Bhutan.

6.29.2 The Institute has five-fold objectives:—

- (i) To provide diagnostic, therapeutic and rehabilitation services to the mentally ill both at primary health care and institutional level.
- (ii) To provide post-graduate psychiatric training in the fields of psychiatry and allied fields like Clinical Psychology, Psychiatric Social Work and Psychiatric Nursing.
- (iii) To conduct research in behavioural sciences.
- (iv) To extend mental health services to the rural/tribal area.
- (v) To impart training in behavioural sciences to the medical and para-medical personnel from other organisations.

6.29.3 It conducts post-graduate courses in Psychiatry, Clinical Psychology, Psychiatric Social Work and psychiatric Nursing, leading to the qualifications of Ph.D. in Clinical Psychology M.D., D.P.M. in Psychological Medicine, M.Phil. in Clinical Psychology and Psychiatric Social Work and Diploma in Psychiatric Nursing.

6.39.4 The hospital provides the full range of psychiatric facilities to patients of all age groups starting from children to the elderly. In addition to the 643 in-patient beds, it has family therapy units functioning in the cottages outside the hospital.

6.29.5 The budget provision for Central

Institute of Psychiatry, Ranchi is Rs. 199.00 lakh for Plan and Rs. 220.00 lakh for Non-Plan.

## **6.30 National Tuberculosis Institute, Bangalore**

6.30.1 The National Tuberculosis Institute, Bangalore was established in the year 1959 by the Government of India with the assistance of WHO and UNICEF to evolve nationally applicable methods of tuberculosis control and training of key personnel for T.B. Control Programme. About 5,000 personnel of different categories have been trained in 62 courses held in the Institute so far. Apart from training of District T.B. Teams, it also undertakes Refresher Courses for District TB Centres personnel and Reorientations/Trainings/Seminars for Senior Health Administrators and professors of Medical Colleges etc. Trainees from abroad also attend various courses at the National Tuberculosis Institute, Bangalore. The Institute has also been recognised as a WHO collaborating centre. The second International Training Course at the National Tuberculosis Institute was held in January, 1990. The Institute is also engaged in important epidemiological, sociological, bacteriological and operational research connected with the TB Control Programme and provides suitable technical guidance to the District TB Centres so that their performance can further improve. The Institute is also given the responsibility of monitoring the District TB Programme of the country. Quarterly reports are received by the Institute which are scrutinised and comments are given to the State Governments to take necessary corrective action wherever necessary. The Institute also brings out annual report on monitoring of the Programme.

## **6.31 National Institute of Mental Health and Neuro Sciences, Bangalore**

6.31.1 National Institute of Mental Health and Neuro Sciences, Bangalore, was established as an Autonomous Body, regis-



tered under the Societies Registration Act on 27.12.74 by integrating erstwhile All India Institute of Mental Health under the Government of India and Mental Hospital, Bangalore under Government of Karnataka. This integration has facilitated better functioning and rapid growth of the Institute. This Institute has been rendering service, training and research functions in the field of Mental Health and Neuro Sciences.

6.31.2 The Institute is managed by the Governing Body headed by the Union Health Minister as the Chairman and Karnataka State Health Minister as the Vice-Chairman. The Governing Body consists of representatives of Government of India, Government of Karnataka, Vice-Chancellor of Bangalore University, Director General of Indian Council of Medical Research and Faculty members of the Institute. The Governing Body is assisted by the Standing Finance Committee, Academic Committee, Building and Works Committee and Rehabilitation Committee. The Institute is affiliated to the Bangalore University for the award of Degrees and Diplomas and 167 students were admitted to degree and diploma courses during the year.

6.31.3 Based on the New Education Policy of 1986, the NIMHANS Bangalore has been selected by the U.G.C. as a Nodal Centre in Psychiatric Social Work.

6.31.4 The Institute renders Rural Services also at door steps besides the permanent service rendered at the Rural Mental Health Centre at Sakalawara (Bangalore Rural District).

6.31.5 The Budget provision for the Institute for the year 1991-92 is Rs. 277.00 lakh under Plan and Rs. 333.00 lakh under Non-Plan.

## 6.32 All India Institute of Speech and Hearing, Mysore

6.32.1 The All India Institute of Speech and Hearing, Mysore, was set up in 1965 as an autonomous body registered under the Societies Registration Act, with the primary responsibility for imparting professional training, rendering clinical service to the public with speech and hearing disorders and also conducting research in the field.

6.32.2 The Institute has many departments, viz. Speech Pathology; Speech Sciences; Audiology; Clinical Psychology; ENT (Otolaryngology); Electronics; and Publicity and Information.

6.32.3 B.Sc. and M.Sc. courses in Speech and Hearing are conducted in the Institute. Considering the demand for speech and hearing specialists in the country, the intake of students for B.Sc. and M.Sc. were increased from 23 to 33 and from 13 to 23 respectively from the academic year 1989-90. Several research programmes are going on and action has been initiated to start more research projects. Construction of a separate speech block at a cost of Rs. 32.73 lakh for the Department of Speech Pathology has commenced and the work is in progress. Construction of a separate block at a cost of Rs. 5.80 lakh for the Department of Otolaryngology has been completed. A room to house a generator was completed at a cost Rs. 32,000/-. During the year 1990 (1.4.90 to 30.9.1990), 4245 New cases and 6712 Repeat cases were seen at the Institute. As part of the Public education activity, several Speech and Hearing Camps were held in different parts of the country by the Institute and many cases were examined during the reported year.

6.32.4 The Budget provision for the Institute for the year 1990-91 is Rs. 20,00,000/- for Plan and Rs. 53,00,000/- for Non-Plan.



### 6.33 Indian Council of Medical Research, New Delhi

6.33.1 The Council is an apex body in the country for formulation and promotion of bio-medical research. Its progress of work is detailed in the ensuing paras.

6.33.2 *Communicable Diseases*: During the last four decades, the life expectancy in India has risen from 32 years in 1951 to 57 years in 1981. This is mainly attributable to reduction in deaths from communicable diseases. However, communicable diseases still account for a large proportion of the morbidity and about one third of mortality. Therefore, control of communicable diseases has been accorded a very high priority in the Council's research efforts which are mainly directed towards evolving and evaluating effective disease control strategies and their implementation through the existing health care infrastructure.

6.33.3 *Vector Borne Diseases*: As an alternative to the conventional methods, the bio-environmental strategy for control of malaria is being evaluated at 11 sites with varying degree of endemicity and problems related to vector species, parasite, terrain and human ecology. The work is in progress in various phases. The strategy is being integrated in the existing primary health care system. It has been decided that four districts in UP and two in Gujarat would be brought under this strategy. The Master Plans for control of malaria in Madras and Delhi have also been drawn up.

6.33.3(i) Due to selection of insecticides not based on scientific reasons, resistance to various insecticides is emerging. As a result of studies on sibling species of *Anopheles culicifacies*, it is now possible to advise on the type of insecticide to be used in a particular geographical area. For the first time malathion resistance has been observed in Species 'A' in Haryana (till now resistance was seen only in Species B). It has been shown that an

enzyme carboxyl esterase is responsible for the development of resistance to malathion. Monitoring of chloroquine resistant *P. falciparum* malaria has revealed that areas with RI and RII patterns of chloroquine resistance are increasing and pockets having RIII pattern of chloroquine resistance have started appearing. This is an alarming trend.

6.33.3(ii) Studies on chloroquine resistant malaria in tribal belt of Koraput district of Orissa are being conducted with the main focus on assessing the intensity of the problem by carrying out extensive malaria surveys. Malaria transmission was interrupted in rural areas by insecticide impregnated bednets. Morbidity due to malaria was reduced by surveillance and chemotherapy. Based on findings from detailed epidemiological studies, a suitable control strategy is being developed.

6.33.3(iii) At RMRC, Dibrugarh, patients with *P. falciparum* malaria are being studied for their response to different anti-malarial drugs. Entomological and epidemiological evaluation of the impact of deltamethrin/permethrin treated mosquito nets on malaria in selected areas has been undertaken. Sensitivity of some of the indigenous plant products against chloroquine resistant *P. falciparum* malaria was studied during the year.

6.33.3(iv) The VCRC, Pondicherry, has undertaken studies aimed at understanding the dynamics of the parasite causing filariasis in human and vector populations with and without control measures and developing appropriate mathematical models for optimization of control measures.

6.33.3(v) As an alternative to insecticide spraying research on isolation and testing of various biological control agents (like *Bacillus sphaericus*, *B. thuringiensis*, *Lagenidium P.*) were continued and the application method perfected. *Romanomermis*, a mermethid was suc-



cessfully used for controlling mosquito breeding in rice fields and grass lands.

6.33.3(vi) Efforts to develop new insecticides have resulted in the formulation of a biodegradable controlled release formulation which is capable of controlling mosquito larvae in polluted water for more than six weeks. The use of this formulation can bring down operational cost to one sixth of present expenses and can increase operational efficiency.

6.33.3(vii) Control of Malayan filariasis in Shertallai using bioenvironmental control methods is being undertaken. The programme covers a population of 1.5 lakh spread over an area of 300 sq. kms. Methodology for sustaining people's movement with thousands of volunteers from all strata of the society has been created for filariasis control.

6.33.3(viii) Chemotherapy units for treatment of filariasis have been jointly established by the WHO and ICMR at Bhubaneswar and Alleppey. The efficacy, tolerance, laboratory and clinical safety of varying oral doses of ivermectin are being investigated and will be compared to DEC in a double blind placebo controlled clinical trial.

6.33.3 (ix) The susceptibility of the vector to insecticides, is being tested by imported DDT-impregnated paper. The RMRI, Patna, has developed an indigenous technique of impregnating the paper with DDT. The results of indigenous kit compare well with the imported one.

6.33.3 (x) Unresponsiveness of *leishmaniasis* patients to stibamate therapy is being increasingly reported. Pentamidine isothionate is a very effective second line drug but it is toxic. It has been shown that a combination of stibamate and pentamidine, at half their usual doses, is helpful in management of patients not responding to stibamate therapy.

6.33.3 (xi) While investigating the im-

munodominant antigen of *L. donovani*, a 60 KD a molecular weight glycoprotein has been purified, and is being used to study immune response in animals. Synthesis and biological evaluation of new leishmanicidal agents are also being supported.

6.33.3 (xii) The RMRC at Jodhpur was established as Desert Medicine Research Centre (DMRC) to work on the health problems of desert region. Studies have been conducted on the local problems of the desert population such as leishmaniasis, dracunculosis, etc.

6.33.4 *Diarrhoeal Diseases*: A community based study conducted by the National Institute of Cholera and Enteric Diseases (NICDED) Calcutta, on about 1600 children, under five, in West Bengal showed that the prevalence and mortality associated with persistent diarrhoea was very low in this area. Presence of mucus and blood in the stools was found to be the only factor associated with the increased risk on persistent diarrhoea. Blood and mucus in stools were seen in about 50% of episodes of diarrhoea. In these children dehydrations (as a result of fluid loss) is not a major problem, therefore, oral rehydration therapy has little or no effect on mortality rates. The study underscores need to develop alternate strategies for the management of invasive diarrhoea.

6.33.4 (i) Rotavirus is emerging as an important etiological agent for diarrhoea in children. Until now, man was considered the only reservoir of infection. However, studies conducted at Manipur reveal a strong possibility of zoonotic transmission of rotaviruses.

6.33.4 (ii) With the ultimate aim of producing a vaccine against *Salmonella typhi*, its outer membrane components are being studied. The porins have been purified and found to be immunogenic and provide protection in animals from *S. typhi* infection.



6.33.5 *Leprosy*: Long duration of therapy and emergence of dapsone (DDS) resistance have necessitated clinical trials aimed at identifying combination of drugs for treatment of leprosy and optimum duration of therapy in *pauci* - and multi-bacillary leprosy. Different drug regimens using rifampicin, DDS, clofazimine and pyrazinamide are being tried out. Results of these studies show that patients with multi bacillary leprosy become smear negative within two years of treatment. However, in patients with high bacillary counts, therapy for 3-5 years might be needed to achieve smear negativity. Studies on multi drug therapy (MDT) in patients with pauci bacillary leprosy have shown that 6 months of MDT may be inadequate and use of dapsone monotherapy for 6 months following 6 months MDT results in significant reduction in relapse and late reaction rates.

6.33.5 (i) A surgical technique for correction of ulnar nerve palsy by dermodesis and flexor pulley advancement is being developed and evaluated.

6.33.5 (ii) The Council is supporting a large scale community based study on the safety and efficacy of ICRC vaccine for immuno prophylaxis against leprosy in Maharashtra State. The Field Unit under the Central JALMA Institute for Leprosy (CJIL), at Awadi, has initiated a baseline survey on prevalence and incidence of leprosy, and skin reactivity, as a preliminary step before launching the trials with candidate anti-leprosy vaccines.

6.33.6 *Tuberculosis*: Studies have unequivocally demonstrated the safety and efficacy of short course chemotherapy (SCC) in both pulmonary and extra-pulmonary tuberculosis in all age groups. Based on these findings the SCC has been introduced in the National Tuberculosis Control Programme. Studies undertaken by the TRC indicate that SCC eliminates the need for surgery in patients with spinal tuberculosis or tuberculous meningiomas.

6.33.6 (i) Non-compliance and poor case holding are a major hurdle in successful implementation of National Tuberculosis Control Programme. A study to find reasons for poor case holding has been initiated. Attempts are being made to involve voluntary agencies to improve case finding and case holding.

6.33.7 *Viral Diseases*: In May 1986, the Council initiated at national level clinical and serological surveillance for *Human Immunodeficiency Virus* (HIV) infection in collaboration with the Directorate General of Health Services (DGHS) and State health authorities.

6.33.7 (i) A progressive increase in seropositivity rate among blood donors was noted in 1987 and 1988 and based on the Council's recommendations, a phased programme for screening donated blood for HIV infection was taken up by the DGHS in collaboration with ICMR and State health authorities. The Council's research studies have provided the database for evolution of the National AIDS Control Strategy and initiation of appropriate intervention programme.

6.33.7 (ii) In 1990, a sero-survey in North Eastern Region showed that seropositivity rate among blood donors had now reached about 30%.

6.33.7 (iii) Studies undertaken in Vellore and Bombay have demonstrated a steep increase in HIV seropositivity rate among prostitutes and promiscuous men in the last 5 years. Between 25 to 30% of all prostitutes screened in 1990 were seropositive. A similar steep rise in seropositivity rate among men attending sexually transmitted diseases (STD) clinics occurred and in 1990; over 10% of these men were found to be seropositive. Reported seropositivity rate among low risk groups such as pregnant women and men and women attending medical and surgical out-patient departments ranges between 1-5/1000.



6.33.7 (iv) The Council had convened an Expert Group to formulate hospital policies for care of HIV infected persons, and to provide guidelines for prevention of accidental spread of HIV infection amongst health workers.

6.33.7 (v) In order to undertake long term studies on ecology and possible control measures of *Japanese encephalitis*, a field station has been established in Gorakhpur. Initial studies have been focussing on entomological aspects to determine the mosquito fauna, their seasonal prevalence, ecology and the vectors of JE in the area. Insecticide susceptibility studies indicate that *Culex tritaeniorhynchus* has developed resistance to organochlorine insecticides and deltamethrin in Kolar district (Karnataka).

6.33.7 (vi) The RMRC, Dibrugarh has initiated studies on determination of criteria for predicting a JE epidemic in a selected area in Assam. Studies on domestic cattle and poultry have been suggested along with detailed study of potential vector.

6.33.7 (vii) Studies comparing three and two dose vaccine schedule of freeze dried formalin inactivated JE vaccine manufactured by Central Research Institute, Kasauli, showed that the three dose schedule is necessary for optimum response.

6.33.7(viii) The Centre for Research in Medical Entomology (CRME), Madurai, is making efforts to study the relationship, if any, between vector density, sero-conversion in sentinel pigs, development of HAI antibodies in primary school children and occurrence of the disease. *Neem* cake power and *neem* coated urea are being tried to control culicine breeding in rice fields.

6.33.7 (ix) Using a tissue culture derived hepatitis A virus, an ELISA has been standardized for detection of anti HAV-

IgM. This is the first indigenous test available in India. Serological studies after administration of plasma derived and recombinant hepatitis B Vaccine show that sero-conversion is better with recombinant vaccine (93%) than that with plasma derived vaccine (89%). Results of investigation of NANB hepatitis epidemics indicate that Enteric NANB Hepatitis (ENANBH) affects children and adults equally, whereas adults present clinical disease more frequently.

6.33.7 (x) About 75 litres of *Kyasanur Forest Disease* vaccine has been prepared by the Karnataka Government at Shimoga under the supervision of NIV. The vaccine has been found to be adequately potent.

6.33.7 (xi) Studies undertaken by the Enterovirus Research Centre (ERC), Bombay showed that over the last few years the following shifts have been observed in polio epidemiology: fewer cases are being recorded in the June-September period: less than 30% of polio patients are below one year of age; and the percentage isolation of non-polio enteric virus is gradually increasing. Spot mapping of all cases for the first four years has been done.

6.33.7 (xii) A comparison of antibody response of infants to OPV and killed polio vaccine (KPV) done by the Centre for Advanced Research in Virology, CMC, Vellore, showed that KPV produced higher titres per dose as compared to OPV. A district based comparison of KPV and OPV use under programme conditions is now in the second year of operation.

6.33.8 *Health Services Research*: The district level primary health care project being conducted at Varanasi, has provided some insights into the difficulties in organizing such studies, and the linkages that need to be established between the research and the service arms of health care. An independent appraisal of



the project has been completed. The experience gained in this project is likely to be of use in conducting district level health service research projects in future.

6.33.8 (i) Valuable information is emerging on the pattern of health expenditure in India from an on-going study at Jalgaon district in Maharashtra. The impact of health education on health status is being documented in a case-control study in Maharashtra. The results would help in developing a blueprint for planning, implementing and evaluating health education programmes.

6.33.8 (ii) The ICMR and the Ganga Project Directorate are jointly supporting a study to evaluate the health impact of projects implemented under the Ganga Action Plan.

6.33.8 (iii) The ICMR and ICSSR have jointly undertaken the preparation of a new document on Health for All by 2000 A.D., which is in pursuance of the recommendations made by the ICSSR-ICMR joint panel on health, to examine the impact of the main ideas and strategies presented in the earlier ICMR-ICSSR report on Health for All.

6.33.9 *Tribal Health:* The Council's Regional Medical Research Centre (RMRC), Jabalpur has investigated an outbreak of dysentery in Baster district. *Shigella dysenteriae* type 01 was identified as the causative organism, which was resistant to the commonly used anti-microbials, except furazolidone.

6.33.9 (i) Following the eradication campaign in 1952-56, yaws was believed to have been eradicated from Madhya Pradesh. But re-surveys in 1987 showed that infection was still present, and a campaign for the administration of three-rounds of long acting penicillin was launched. A repeat survey shows that the prevalence of yaws has declined from 7 to 1.4%.

6.33.9 (ii) To assess the health and nutritional profile of the tribals, surveys have been conducted amongst various tribes. In the *Sahariya* tribe, 19% were found to have cervical lymphadenopathy and 42% were found to be suffering from respiratory infections. Among children of Abujmaria tribe, a very high prevalence (83%) of genu valgum was observed. About half the adult population and 10% of children of *Bharia* tribe were found to have goitre. Appropriate intervention studies are being planned.

6.33.9 (iii) A high prevalence of haematological disorders has also been observed among tribals i.e. sickle cell haemoglobin (*Bharias*:13%, *Gondsh* 20%); Glucose -6- phosphate dehydrogenase (G6PD) deficiency (*Bharias*: 12%, *Gonds*: 3%, *Sahariya*: 2.7%). Among the *Sahariyas*, absence of sickle cell haemoglobin and prevalence of beta-thalassaemia have been reported for the first time.

6.33.10 *Reproductive Biology And Fertility Control:* The Council has recently completed a study on evaluation of quality of family welfare services rendered at PHC level through its network of 33 Human Reproduction Research Centres (HRRCs) covering a total of 398 PHCs all over the country. The data of this study showed that overall quality of family welfare services offered in the National Family Welfare Programme were poor and MCH component was extremely weak. An epidemiological survey for estimating prevalence of morbidity and mortality relating to reproductive health in women in the age group of 15 to 45 years is being carried out in several districts of Uttar Pradesh. Further, in order to promote utilisation of existing contraceptive methods, a study has been initiated in B and C type post-partum centres through the network of HRRCs which aims at providing better counselling and training to the health personnel while providing the services of oral pills and copper-T 200, for which training manuals have been provided. Pre-programme introduc-



tion study with subdermal implants—'Norplant R-2' through B&C type postpartum centres indicated that continuation rates of this device were significantly higher as compared to Copper-T 200 and it provides excellent contraceptive protection.

6.33.10(i) Clinical trial with Ru 486 (200 mg) followed by oral administration of 9-Methylene PGE-2 for menstrual regulation was conducted on a pilot basis and based on the findings of this study, a phase II study with Ru 486 (200/600 mg) followed by 3/5 mg 9—methylene PGE2 gel is being planned. Randomised clinical trials with 9-methylene PGE-2gel and laminaria tent for cervical dilation prior to the termination of pregnancy (both first trimester and second trimester) is in progress. A phase-II clinical trial for administering intranasal contraceptives has been initiated at the Institute for Research in Reproduction, Bombay.

6.33.10(ii) In the field of immunodiagnosics, RIA kits for testosterone, progesterone and estradiol have been developed and distributed to various medical institutions of the country. The Centres for Advanced Research in Reproductive Biology at Bangalore and Ludhiana are focusing their studies on gonadotrophins sperm growth maturation and follicular growth and development in order to develop safe and simple methods of fertility regulation. However, the work on regulation of male fertility using prostate inhibin peptide is continuing at IRR, Bombay in addition to developing ELISA methods for the estimation of urinary LH/FSH hormones.

6.33.11 *Maternal and Child Health:* The major thrust in the area of MCH, which has been mainly pursued through extramural research, is to improve the quality and coverage of family welfare services at the block level in the existing health care delivery system utilizing area/region specific intervention strategies, more important being the high risk ap-

proach. Sufficient emphasis has been laid on training with technical and health management, community participation and development of programme orientated management information & evaluation system (MIES). In addition, studies relating to women's health and development are on-going where intersectoral approach is being followed. Orientation of girls in the age group of 7-19 years has been initiated focussing on general health, environmental sanitation, vocational training and raising their self esteem. Further, in order to raise the status of young girls, a study utilizing calendars medium containing relevant messages has been initiated in Uttar Pradesh.

6.33.11 (i) A study has been initiated to see whether periconceptional use of vitamins prevents the recurrence of neural tube defects in women with history of previous congenital malformed children. The Genetic Medicine Research Institute at Bombay is continuing its research activities in clinical, diagnostic, preventive and therapeutic aspects of clinical genetics. Steps to prevent genetic disorders by offering genetic counselling and establishing screening methodologies for prevention of congenital malformation are ongoing. The Centres for Advanced Research in Genetics are continuing to work on the different aspects of bio-chemical genetics at Bangalore and on clinical genetics at Lucknow.

6.33.12 *Nutrition:* Intramural research on nutrition is being carried out by the National Institute of Nutrition, (NIN) Hyderabad which is the oldest Institute of ICMR. The NIN has developed simple indicators for psychosocial development and a home-based physical growth and developmental card for children. Studies conducted by NIN indicate that ICDS has improved the out-reach of MCH and nutrition services in 4 States. It has also shown that by improving the quality of nutritional supplements, and nutrition education, the supplementary feeding programme out-reach would be improved.



6.33.12 (i) A major study on the nutrition status, dietary pattern and health status of tribal population of five districts in Rajasthan has been undertaken by RMRC, Jodhpur. The feasibility of a camp approach to organise delivery of health services to the desert population working in salt manufacturing units was also tested.

6.33.12 (ii) With regard to extramural research, study on monitoring and surveillance of food contaminant hazards in India has shown that 30% samples of bovine milk were contaminated with pesticide residues of DDT complex and about 25% with HCH pesticide residues. Canned food and turmeric were contaminated with heavy metals such as cadmium, lead, zinc and copper. Another study is on-going in joint collaboration of ICMR-USAID to find out the inter-relationship of maternal infection and maternal nutrition with low birth weight infants.

6.33.13 *Environmental And Occupational Health*: The research activities of the Council's National Institute of Occupational Health (NIOH), Ahmedabad covered a wide spectrum of areas with the major thrust on occupational health problems of workers engaged in unorganised sectors of industries and mines. The Institute undertook an epidemiological survey of villagers living at high altitude, health survey of workers in asbestos mines in Andhra Pradesh, environmental-cum-health survey of workers employed in cotton ginning industry (sewing machine operations), health effects of Poly Aromatic Hydrocarbons (PAH) released from industrial emission and burning domestic fuels, as well as presence of PAH in pan masalas. Other important research programmes initiated include the delivery of occupational health care to rural areas through Primary Health Centres, and collection of data on occupational cancers in collaboration with various cancer registries. The regional centres are involved in studies on coal miners and workers engaged in ferroalloy plants. The NIOH is also involved in imparting training on

occupational health, and various other educational programmes.

6.33.14 (i) *Studies on Bhopal Gas Toxicity*: Following the release of toxic gas in December, 1984 at Bhopal, the ICMR initiated research projects (ranging from epidemiology to molecular biology) to study the health effects of MIC exposure. The Bhopal Gas Disaster Research Centre was set up by the Council in 1986 with the objectives to monitor the progress of the various on-going projects, carry out long term monitoring of morbidities in the exposed population, data analysis and planning for future research.

6.33.14 (ii) The cohorts from severely and mildly exposed areas reveal that not only large segments of population continue to be symptomatic even at the end of five years but symptoms are now being observed in those who were earlier reported to be symptom free. There is also evidence of sustained and increasing trend of morbidities in the cohort. These include obstructive airway lung disease, corneal opacities, and neurotic disorders. Other on-going studies are monitoring pregnancy outcome, growth and development of children and immunologic and cytogenetic disturbances, if any.

6.33.15 *Non-communicable Diseases*: The major thrust areas of research in non-communicable disease have been cancer, cardiovascular diseases, mental health, environmental and occupational health, ophthalmic science, oral health, disability and rehabilitation.

6.33.16 *Oncology*: The major areas/institutional strengthening for research in oncology include cancer registration through the National Cancer Registry Programme, multi-disciplinary research on control of cancer cervix, operational research on prevention and early detection of oral cancers and cervical cancer, tobacco economics, utilization of mass media for community education on drugs, alcohol & tobacco, Centres for Research



in preventive Oncology and Environmental Carcinogen Testing Units. This Strategy is in consonance with the National Cancer Control Programme (NCCP).

6.33.16 (i) The data generated by the National Cancer Registry Programme (erstwhile National Cancer Registry Project) have been useful in formulating the National Cancer Control Programme and preparing strategies for cancer control. The data from the six population based cancer registries clearly show that tobacco related cancers form about one third of the total. The data from the rural registries at Barsi, though preliminary, indicate that cancer incidence is lower in rural areas than in urban areas. The data from the hospital cancer registries indicate that a large proportion of cancer patients are seen at late stages, when only palliative treatment and pain relief can be offered.

6.33.16 (ii) Case control studies on cancers of cervix, stomach, oesophagus, and pharynx have been initiated with the aim to provide information on aetiology of these common cancers in the country. The NCRP data are being utilized for estimation of risk, generation of hypotheses, effectiveness of treatment modalities, computation of survival rates, etc.

6.33.16 (iii) To achieve primary prevention of tobacco related cancers, a project aimed at studying the feasibility of involving the health infrastructure in an anti-tobacco educational programme has been initiated at Bangalore, Goa, Agra and Trivandrum. In order to assess the effectiveness of radio as an instrument of change with regard to drugs, alcohol and tobacco use, RADIO DATE, a collaborative project of the ICMR and AIR has been initiated. The project is in the form of a weekly serial of 26 episodes, which are being broadcast from all the 104 AIR stations, in 12 regional languages, in addition to Hindi & English. This will be followed by a postal survey of registered

listeners to assess the impact of the serial.

6.33.16 (iv) Case variables and identification of aetiological factors in nasopharyngeal carcinoma (NPC) are being studied at RMRC, Dibrugarh. Studies on the environment of patients of NPC were initiated to confirm the preliminary findings of mutagenic activity in soot and smoke dried food materials. Study of distribution of Epstein Barr virus among NPC patients and controls is proposed to be undertaken.

6.33.16 (v) The Environmental Carcinogen Testing Units set up by the ICMR will help in understanding the carcinogenic potential of various suspected carcinogens under Indian conditions through regular monitoring of known carcinogens.

6.33.16 (vi) Two Centres for Research in Preventive Oncology, one each at Trivandrum and Ahmedabad, have been identified for studying the effect of different strategies such as anti-tobacco education of professionals and the community, the computation of tobacco economics, and cost of management of tobacco related cancers, cardiovascular diseases and chronic obstructive pulmonary disease (COPD). Plan of work at Ahmedabad pulmonary centre is under finalization.

6.33.16 (vii) The main emphasis of research at the Council's Institute of Cytology and Preventive Oncology (ICPO), New Delhi (formerly the Cytology Research Centre), has been on the control of cancer cervix through a scientifically orchestrated multi-disciplinary approach.

6.34.16 (viii) Observations from the uterine cervical dysplasia study part 1 (UCD-I) have highlighted the natural history and biological behaviour of cervical precancerous and early cancerous lesions on a sizeable cohort of Indian women. Preventable risk factors during the course of cervical carcinogenesis and the



management of precancerous and early cancerous lesions of the cervix are now being studied. Studies on the host immune response and dietary survey have also been initiated.

6.33.16(ix) Behavioural and biological risk factors have been elucidated in the study on primary prevention of cervical cancer. The second phase of the project on community control of cervical cancer has been initiated. The intervention phase is in operation with the training of para-medical workers, screening of eligible females, imparting health education related to cervical cancer to all women at risk in the community and involvement of interns in the various activities of the project. A practical strategy for control of cervical cancer through clinical downstaging with selective cytology by female multipurpose workers has been conceived by ICPO and extended for its reproducibility at other centres in the country. The results from these studies would be useful in providing a strategy for control of cervical cancer.

6.33.17 *Cardiovascular Diseases:* The ICMR's strategies for research in cardiovascular diseases has been through epidemiological studies, intervention programmes and in-depth studies of disease pathogenesis. The feasibility study on utilisation of the para-medical workers in the detection and management of rheumatic heart fever and rheumatic heart disease (RF/RHD) indicated that it is possible to train para-medical workers to provide primary and secondary prophylaxis against RF and RHD. A transfer of technology is being planned to disseminate this programme to the State health services and all medical colleges so as to facilitate/encourage replication of the control programme for rheumatic fever and rheumatic heart disease at a national level.

6.33.17(i) Immunologic, genetic and pathologic studies on RF/RHD cases have yielded valuable information about several critical stages in the natural history of

RF and RHD including factors related to biological causation, especially host susceptibility determinants and the nature of breached immune tolerance on streptococcal antigenic exposure, evaluation of diagnostic tests for accurate identification of RF and rheumatic carditis, immunological perturbations in RF and RHD; and immunopathological characteristics in these disease states.

6.33.17(ii) Preliminary data from the collaborative study on coronary prone behaviour and coronary heart disease (CHD) indicates that Type A behaviour is significantly associated with CHD; age, physical activity and tobacco use are other factors. A two centre study has been initiated on the prevalence of coronary heart disease in India. An Indo-UK study of the Indian population in India in comparison with the immigrant population in UK has been planned to provide insights into the variations in prevalence and factors associated with CHD. Two Centres for Preventive Cardiology will pave the way for innovative and feasible approaches leading to promotive and preventive strategies for control of morbidity and mortality due to common cardiovascular disorders both in urban and rural areas.

6.33.17(iii) The Centre for Advanced Research in Cardiomyopathy has studied the application of *in vitro* system of isolated myocardial cells to screen potential toxic agents that are incriminated in the pathogenesis of endomyocardial fibrosis (EMF).

6.33.18 *Ophthalmic Sciences:* The thrust areas of research in ophthalmic sciences continued to be cataract, operational research on mobile eye camps and ocular infections. A Centre for Advanced Research on Corneal Infections has been initiated to undertake studies on suppurative corneal ulceration, keratomycosis and exogenous endophthalmitis. The Council has also established an International Chlamydiology laboratory under Indo-UK



bilateral technological agreement to support studies on trachoma, para-trachoma; and to provide laboratory diagnostic services.

6.33.19 *Mental Health*: The work carried out at the ICMR Centre for Advanced Research in Community Mental Health at NIMHANS, Bangalore has developed feasible modules for integrating mental health with general health care. This has helped in the implementation of the National Mental Health Programme and the same module has been adopted with minor modifications in some neighbouring countries also. Research on suicide behaviour has given clues to the reasons contributing to suicide, and suggestions for its prevention. Community based survey on drug abuse has also been initiated. Further work is continuing on treatment outcome, and monitoring trends of drug use in urban communities.

6.33.20 *Accidents, Disability and Rehabilitation*: The work undertaken in this area relates mainly to feasibility studies and health education for prevention of physical disabilities. The feasibility study for primary and secondary prevention of hearing impairment in rural areas aimed at primary prevention through sustained health education and early management of upper respiratory tract infection and secondary prevention through early detection and management of conditions like secretory otitis media and adhesive otitis media. The results after one year of intervention showed a perceptible reduction in the problem.

6.33.20(i) Posters, slides and video films have been prepared and pretested in a study on development of health educational material for prevention of childhood injuries. The impact of intervention for prevention of childhood injuries will now be tested in a rural area.

6.33.20(ii) Based on the results of studies in this field, the programme on rehabilitation has been taken up for expansion by

the Ministry of Welfare, with the main aim to develop and test indigenous aids for the disabled and handicapped.

6.33.21 *Gastroenterology*: The thrust of ICMR's research in the field of gastroenterology has been on liver diseases. A Centre for Advanced Research on Liver Diseases has been initiated with the specific mandate to study in depth, the aetiological agent, the epidemiology of hepatitis and the pathophysiology and management of portal hypertension. As a first step, studies on physical, biochemical, molecular and biologic characterisation of enteric NANBV and development of serologic tests are being initiated.

6.33.22 *Oral Health*: A project on development of feasibility module for primary prevention of dental caries and gingival disease in children in a rural community within the existing health infrastructure aimed at assessing an intervention package consisting of oral health care advice on use of brush/*dattum*, restriction on sugar intake and use of fluoridated mouth rinses, imparted by para-medical workers to the rural community. A very significant rise in the KAP scores of the community with 66 per cent of the population using brush and decline in plaque index scores in the severe group has been observed. Trends in prevalence of dental caries in children are also being monitored. In order to review the existing Indian literature and provide guidelines on the use of fluoride, the Council convened a Round Table Conference at Jodhpur which was followed by meetings of the Scientific Working Group on Fluoride.

6.33.23 *High Altitude Medicine*: The High Altitude Centre for Medical Sciences at Kalpa has been set up with the aim to have an integrated development of the area with simultaneous involvement of all technologies targetted towards betterment of health of the population at high altitude. It is planned to start studies on diabetes, cardiovascular diseases and



chronic obstructive lung diseases as thrust areas for research in the first phase. A pilot study on distribution of glucose intolerance and cardiovascular morbidity in the population adapted to living at high altitude was undertaken to provide basic identification of known risk factors for cardiovascular diseases and diabetes in the target population. The second project on chronic obstructive lung disease will be undertaken shortly.

**6.33.24 Pathology:** Studies on dermal pathology, tropical pathology, sexually transmitted diseases, nephropathology and oncopathology are being carried out at the Council's Institute of Pathology (IOP), New Delhi which also continued to serve as a Reference Centre and supplied teaching sets including paraffin blocks, pathological specimens and teaching atlases to various Institutes in India.

**6.33.25 Haematology:** The Institute of Immunohaematology (IIH), Bombay continued research in various fields of immunohaematology, viz., red cells and ante-natal serology, leucocyte immunology, surface markers, immuno-fluorescence (autoimmune disorders and platelet antibody detection), haemoglobinopathies and enzymopathies, etc. The IIH is also engaged in sero-surveillance for HIV infection.

**6.33.25(i) Haemoglobinopathy and allied disorders** which are prevalent amongst the local inhabitants of mongoloid ethnic stock and the tea garden labour population are being studied for their distribution pattern and possibilities of association with malaria at the RMRC, Dibrugarh.

**6.33.26 Cell Biology:** In order to explain the mechanism of mammalian X-Chromosome inactivation, studies at the Centre for Advanced Research in Cell Biology and Genetics, Bangalore have suggested for the first time that the human 'X' chromosome is subject to imprinting and that imprinting occurs in the egg at the

time of fertilisation. This suggestion has now been invoked to understand the puzzling inheritance of the fragile X syndrome the second most frequent cause of mental retardation.

**6.33.27 Traditional Medicine Research:** The Council revived its research activities in the field of traditional medicine in the 7th Plan with a new, disease-oriented approach and identified 6 thrust areas for integrated, multi-disciplinary study viz. anal fistula, filariasis, viral hepatitis, diabetes mellitus, urolithiasis and bronchial asthma. Among these, multicentric clinical trials on an ancient Ayurvedic technique viz. *Kshaarasootra* used in the management of anal fistula have shown 92 per cent success rate in healing as compared to 89 per cent in the group of patients subjected to surgery. This Ayurvedic technique also led to lower recurrence rate of the fistula, as compared to surgery. Studies on other thrust areas are in progress

**6.33.27 (i) Advanced pharmacological studies** have been carried out on a standardized mixture of iridoid glycosides (Picroliv) isolated from *Picrorhiza Kurroa* (*Kutki*) in various animal models of liver damage. Phase I clinical trials are now under way on this compound with permission from the Drugs Controller of India. at the CDRI, Lucknow through the ICMR Advanced Centre on pharmacological studies on Traditional remedies.

**6.33.28 Biostatistics:** The Institute for Research in Medical Statistics, Madras, has been field testing the validity and usefulness of the 30 cluster sample method advocated by the WHO for estimating the immunization coverage under the existing conditions in the Indian villages. If found unsuitable, alternate methods would be developed and field tested. In India, the reliability and completeness of mortality reporting has been questioned. A survey conducted by the IRMS has shown that death records of Madras Corporation are reliable and the information can be used



as base-line data for various programmes. The IRMS, Madras, also coordinates the biostatistical aspects relating to clinical trials involving traditional remedies.

6.33.28.(i) A data bank on growth and physical development of Indian children has been established at the IRMS, Delhi. As an alternative to long-term longitudinal studies for studying growth of the children, a linked cross sectional sampling scheme has been developed, which is not only simple, but economical and time saving as well. Analysis of differentials in fertility level through path analysis has shown that overall development of the district played a crucial role in fertility decline. In a study on the adoption preference of different family planning methods, multiple logistic regression analysis of data has revealed that female literacy level and presence of male child influence the selection of family planning method.

6.33.29 *Informatics & Communication:* During the 7th Plan period, the Indian Council of Medical Research intensified its activities in the field of biomedical information and communication. The *Indian Journal of Medical Research* has been bifurcated into two independent sections (A and B) — section A devoted to Infectious Diseases and section B devoted to Biomedical Research other than Infectious Diseases respectively. The ICMR Bulletin continued to be popular with the scientists as well as media. The Hindi periodical of the Council viz ICMR *Patrika* is also gaining in circulation and popularity.

6.33.29.(i) The health science exhibitions in Hindi being organised by the Council have attracted considerable public attention in the past two years. Efforts were continued during the year to establish data-bases of bibliographic information on priority areas like tuberculosis, viral diseases, leprosy, cancer etc., by the ICMR-NIC Centre for Biomedical Information, New Delhi. The Council partici-

pated in exhibitions (at national/international levels) on science and technology held at Allahabad (in Hindi medium) during November, 1989; at Ottapalam (Palghat) Kerala during September, 1989 and in Health and Medicare Exhibition held in New Delhi in March, 1990. A Workshop was organised at Calcutta for young research scientists on 'Preparation of Good Research proposals' in December, 1989, as part of human resource development research efforts.

#### 6.34 **V.P. Chest Institute, University of Delhi**

6.34.1 The Institute is financed by the Ministry of Health and Family Welfare and is administered by a Governing Body constituted by the Executive Council, University of Delhi, Delhi-7.

6.34.1 (i) The Institute conducts applied and basic research in chest diseases and allied specialities. It provided diagnostic and consultation services in chest diseases. It provided specialised laboratory and clinical diagnostic services in cases with problematic lung diseases referred to the Institute from all over India.

6.34.2 *Training:* The Institute conducts several post-graduate courses of Delhi University viz. DTCD/MD (Tub. & Res. Diseases)/M.D. in non-clinical subjects viz. Pharmacology, Medical Bio-chemistry, Physiology and Microbiology. Besides, Ph. D. students in a number of Medical/Non-Medical subjects receive their training.

6.34.2 (i) 60 students were enrolled for the various post-graduate courses relating to Medical Bio-chemistry, Physiology, Pharmacology, Tuberculosis and Respiratory Diseases, Micro-biology and Ph. D. Out of students, 10 students were undergoing the Diploma course in Tuberculosis and Chest Diseases (DTCD).

6.34.3 *Patient Cares:* During the calender year, 42,963 patients (new and old cases)



attended the Clinical Research Centre. Out of these, 340 were admitted in the indoor wards for special investigation and treatment.

6.34.4 *Publication:* The Institute continued to publish the Quarterly periodical "*The India Journal of Chest Diseases and Allied Sciences*" which has a wide national and international circulation.

6.34.5 *Research:* The areas of research that have been actually pursued in the various departments of the Institute are as under:—

6.34.6 *Research Activity:* Pulmonary Function Tests in school going children at sea level and at high altitude; Role of Nutrition in Leprosy (ICMR); Effect of multi drug therapy on immune system (CSIR); A.I.D.S. and sexually transmitted diseases in leprosy (ICMR); Immunological studies on human breast cancer (CSIR); Inter-action of nutrition, infection and immunity with special importance to common infectious diseases of India; Immunological aspects of human breast milk; Modulation drugs on immune system; Phylogeny of immune responses; Studies on role of viruses in rihinitis (Isolation and serology); Work of influenza viruses; Placebo controlled trial of two doses of chlorine in treatment of asthma-A Clinicophysiological study; Environmental prevalence and role of themophilic actino mycetes in hyper-sensitivity lung disorders; Role of immunotherapy in bronchial asthma and allergens; Allergic bronchopulmonary aspergillosis—follow up and management; Use of choline as asthma, assessment with the biochemical asthma; Occurrence of allergic aspergillus sinusitis; Proforma studies on childhood asthma; Proforma studies on profile of an Indian asthmatic; The behaviour of cardiopulmonary receptors and their role in the control of circulation during anaemia; Effect of positive-and-expiratory pressure on cardiac output and systemic resistance; effects of AJMALOON (Unani drug) on the cardiac performance in mammals;

carbon monoxide hyposia; Cartio accelat-ory reflex originating from carotid chemoreceptors. Studies on thermophilic actinomycebes: Environmental prevalence and role in extrinsic allergic alveolitis; Molecular biology of Asthma Alveolar macrophages as the model system for sig-nal transduction, transmembrane signal-ing; Peritoneal macrophages as the model system for studying their role in mediator release. Study on protein Kinase C and its characterization; and Multicentric trials of traditional remedies in bronchial asthma.

6.34.6 (i) The Budget Provision exists as under:—

Plan	Rs. 25 lakh
Non-Plan	Rs. 165 lakh

### 6.35 Central Health Education Bureau, New Delhi

6.35.1 The Central Health Education Bureau (CHEB) has been providing sup-port to the Ministry in implementing the official policies and programmes of health education in the country since 1956. Some of the important activities carried out by the Bureau during 1990-91 are given in the ensuing paragraphs.

6.35.2 Training Division of the Bureau conducted following courses during the period:

Training Activities					
Name of Course	of Dura-tion	No. of courses	Plan-ned Held	No. of Person-nel trained.	
1	2	3	4	5	6
1. Diploma in Health Education	2 Years	1	1	4 (in progress)	
2. Certificate Course in Health Education	2 months	2	2	14	
3. Medical Officers Course	2 weeks	1	1	10	



1	2	3	4	5	6
4. Key Trainers Course (Professional)	4 weeks	1	1	3	
5. Distt. Dy. Distt. Extension and Media Officers Course	2 weeks	2	—	—	
6. District level Medical Officers Course	5 days	1	1	16	
7. Social Science Research Methods Course	1 month	1	—	—	
8. Health Education for Defence personnel	5 days	1	—	—	
9. Key Trainers (Medical Faculty) Course	2 weeks	1	1	9	
10. Media personnel	4 weeks	1	1	14	

6.35.3 The Media Division of the Bureau is responsible for production of health education and publicity material for dissemination of scientific information on various aspects of health in simple and non-technical language. The Exhibition and Audio Visual Sections of the Division continued to provide support to all ongoing health and other programmes and maintained close-liaison with various media units of the Government viz. AIR/Doordarshan, Films Division, DAVP, PIB, Song & Drama Division to strengthen health education activities. "Swasth Hind", a monthly in English, 'Arogya Sandesh', a monthly in Hindi, 'DGHS Chronicle', a quarterly bulletin in English and 'Swasthya Shiksha Samachar' a Hindi quarterly were brought out regularly.

6.35.4 As many as 12 exhibitions were arranged in and around Delhi on different areas of health education by the Bureau.

Special reference to exhibitions arranged on the occasions of World Health Day 1990 (April 7 to April 10) and Anti-Tobacco Day on 31.5.90 may be made. The Bureau had launched Educational campaign against AIDS as a part of which exhibitions were organised with a view to creating awareness amongst the masses about various aspects of the disease. Films and photographs for both print and audio-visual media were prepared. The audio-visual services of the Bureau were utilized for health education purposes and also as a part of the training programmes.

6.35.5 The Bureau keeps in contact with the SHEBs and exchanges information on health education activities by procuring/compiling monthly reports, visiting Bureau and holding review meetings/conferences. Such meetings/conferences help in reviewing the health education activities in the country and providing guidance where needed.

6.35.6 Intensive Health Education project for Primary School Children in Rural areas—An 'Intensive Health Education Project' launched in 10 Districts of 10 States covering 15 lakh Primary School Students, 5,000 N.S.S. volunteers, 30,000 teachers and 10,000 schools which aims at utilizing child-to-child approach and youth-to-child approach for generating self-health care, continued to be in operation. The Centrally Sponsored National School Services Scheme was continued.

6.35.7 The Bureau continued to coordinate with the Ministry of Human Resources Development, NCERT, CBSE, UGC, etc. for strengthening health education programmes of formal and non-formal education for children, youth, women, parents, teachers and teacher-educators in the country.

6.35.8 Urban F.S.D.C. continued to impart field training to the participants of various training courses being conducted by CHEB. Observational visits to the field were arranged for visitors whenever needed.



### 6.36 Central Bureau of Health Intelligence, New Delhi

6.36.1 The Central Bureau of Health Intelligence in the Directorate General of Health Services, collects, analyses and disseminates the statistical information on health conditions in the country as a whole. It also conducts the training programmes for different categories of statistical personnel and collaborates for this purpose with other sister Organisations, including international agencies. It also renders technical advice as and when called for.

6.36.2 *Epidemic Intelligence*: The obligations under the International Health Regulations are being observed. The position in respect of internationally quarantinable diseases viz. Cholera, Plague, Yellow Fever in the major sea ports/airports is being received regularly in the C.B.H.I. and transmitted every Wednesday to W.H.O. Based on the reports of the State Health Authorities, weekly epidemiology report is prepared and sent to W.H.O., other countries and State Health Authorities every week.

6.36.2 (i) Surveillance on principal communicable diseases other than those covered under the International Health Regulations is also being kept. Monthly reports on these diseases are being received from States/Union Territories every month in the prescribed proforma. This alongwith report on other diseases like Malaria, Leprosy and Blindness are published in the *Monthly Health Statistical Bulletin*.

6.36.3 *Training Programme*: The C.B.H.I. is coordinating training programmes both in Vital and Health Statistics and Medical Records Sciences. During 1990-91 a budget of Rs. 10.00 lakh was provided.

6.36.4 *Vital and Health Statistics*: Following courses are conducted for imparting training at Model Vital and Health Statistics Unit, Nagpur and Regional

Health Statistics Training Centre, Chandigarh:

- i) 10 Weeks Course on General & Health Statistics
- ii) 12 Weeks Course on Medical Coding and
- iii) 2 Weeks Demonstration Course for Medical Officers.

6.36.4. (i) During the year 1990-91 a total of 25 candidates in General and Health Statistics, 14 candidates in Medical Coding and 6 medical officers were given training in these two Centres.

5.36.5 *Medical Records Science*: Training courses for Medical Record Officers of one year duration and Medical Record Technicians of six months duration are being conducted at Training Centres for Medical Records, Safdarjang Hospital, New Delhi and Jawaharlal Institute of Post-Graduate Medical Education and Research, Pondicherry. During 1990-91 a total of 9. & 17 candidates were trained in the courses for Medical Record Officers and Medical Record Technicians respectively at these two centres.

6.36.6 *Seventh Five Year Plan*: During the 7th Five Year Plan, one Training Centre in Medical Records Science at Assam Medical College and Hospital Dibrugarh and two new training Centres in Vital and Health Statistics and Guwahati and Bangalore were sanctioned. However these could not be established due to certain administrative difficulties.

6.36.7. *Field Studies*: Six field survey units established and located in the offices of the Regional Director (H&FW), at Patna, Bangalore, Bhubaneswar, Jaipur, Lucknow and Bhopal are at present carrying out various field studies in health and related matters.

6.36.8. *W.H.O. Assistance Projects*: C.B.H.I. is co-ordinating WHO Assistance Project in respect of fellowships, group



educational activities, strengthening of institutions through supplies and equipment etc. A provision of US \$ 4,23,900 was made under the head "IND HST005" Development and Training for Health Information System for the year 1990-91.

6.36.9. *Health Management Information System*: Consequent upon the acceptance of the goal of 'Health for All by 2000 A.D.' Government of India have initiated a plan of action for improving the information support for the management and evaluation of health development. As a pilot project, Government of India, in consultation with WHO, had selected four States viz. Gujarat, Maharashtra, Rajasthan and Haryana where a modified system of Health Information was tested and found to be satisfactory for extension in the country. A team of officers from Directorate General of Health Services and NIC visited various States and further modified the system and made it computer compatible for collection of data from the periphery and their treatment by the district computer unit of the National Informatic Centre under Planning Commission. The flow of data will be through NICNET. This system was discussed in the meeting held in September, 1990 at New Delhi under the Chairmanship of Secretary (Health). In the meeting it was decided that the system would be made operational in all States and U.Ts. Financial support was assured by the Adviser Health, Planning Commission. The activities are already under way for the implementation.

6.36.10. *Evaluating the strategies for Health for All by the year 2000 A.D.*: The country is presently engaged in Evaluating the strategies for Health for All by the year 2000 and the report is expected to be submitted to the Regional Office of World Health Organisation by January, 1991. A common framework developed and designed by the WHO for the evaluation was pre-tested in the country in April-May, 1990 and the report thereof was sent to WHO/HQ in July, 1990 by this Ministry.

WHO has considered the report "extremely valuable" for the final revision of CFE/2 to be used by the all countries.

6.36.11 *Publications*: C.B.H.I. has been bringing out several important regular and adhoc publications viz. *Health Information of India* (Annually), *Health Services in India* (Annually), *Monthly Health Statistical Bulletin*, *Directory of Hospitals in India*, *Medical Education in India*, *Para-Medicals Training in India* and *Health Atlas of India* etc. *The Health Information of India* has been computerized and the 1990 edition has been sent for printing.

### 6.37. **National Medical Library, DGHS, New Delhi**

6.37.1 The National Medical Library under the Directorate General of Health Services functions as the national focal point (NFP) for collection, analysis, storage and dissemination of biomedical information to the various categories of users all over the country. To meet their information requirements, it provides photocopies of published literature, generates tools like Index to Indian Medical Periodicals, *Chetna*, Library Bulletin etc., arranges computerized bibliographic searches from data basis like MEDLARS, POPLINE etc., organizes orientation training courses in Health Sciences Librarianship, etc.

6.37.2 *Acquisition of Health Sciences Literature*: The Library procured 1,700 medical books and expected to add another one thousand books before the end of the year 1990-91. One hundred books of administrative nature were procured for the official use in the DGHS and Ministry of Health & F.W. One hundred and ninety three publications were received gratis. Two thousand and sixty current journals are being received in the Library out of which 1,725 including 30 new journals are subscribed and 335 journals are received gratis/in exchange.



6.37.2 (i) A Branch Library is being maintained at Nirman Bhavan for the use of the officers and the staff of the DGHS and Ministry of Health & F.W. Efforts are being made to procure more publications in Hindi.

6.37.3 *Processing of Literature:* One thousand six hundred and twenty publications have been classified and catalogued, another 800 publications were likely to be processed before the end of 1990-91.

6.37.4 The computer version of library catalogue had been started since January 1989. Quarterly commulative volume under 3 sequences viz. author, title and subject has been taken out and displayed at counter of NML for consultation. It is planned that annual cumulative volume will be taken out as soon as the new computer becomes operational. The annual cumulative volume cannot be taken out from the PC due to its limited capacity.

6.37.4 (i) *Reference Services Division:* Circulation: Six hundred and sixty new institutional members and 50 private members were registered as the borrowing members of the Library.

6.37.4 (ii) Library facilities were used by more than 52,000 visitors consulting over 4,10,000 publications. Seven thousand one hundred and eighty-five publications were issued to the borrowing members and 6,100 publications were returned by them.

6.37.4 (iii) The NML provided 780 publications on inter-library loan basis to other libraries and requested 260 publications from them. 'No Demand Certificates, were issued to 668 applicants.

6.37.4 (iv) *Reference:* The Library answered 11,000 reference queries in person/on phone and by mail.

6.37.4 (v) *Reprography:* Eight hundred and sixty photo copy requests were received and 2,13,800 pages of photocopy

requests were supplied upto September, 1990. One hundred and fifty two requests for references not available in India were supplied to the National Library of Medicine (USA). The Library also received 320 requests from SE Asia for photocopies which were supplied to them as a HELLIS NFP. Two hundred and twenty four photocopies were also supplied to DGHS/Ministry of Health & F.W.

6.37.4 (vi) *Medlars Searches:* Computerised searches from the bibliographical data base MEDLARS of the NLM (USA) were processed for 105 requests through the MEDLARS Centre for India functioning at the National Informatics Centre at New Delhi. New searches are being conducted in the NML as CD ROM of the MEDLARS data base from NLM (USA) has been obtained through the courtesy of WHO. The MEDLARS data base will also be updated from time to time at a regular interval. It is hoped that by getting a MEDLARS data base at NML, the search request will increase substantially during this year.

6.37.5 *Documentation:* The Documentation Centre of the NML continued to carry out the mandate of generating tools/services for better dissemination of information to the users in the field of health sciences.

6.37.5 (i) *Index to Indian Medical Periodicals:* Data for 1988 articles from Indian Medical Periodicals is being prepared for feeding in the database. The development of the National Data Base of Indian Health Sciences Literature is likely to be accelerated during the current year when a large micro-computer system is installed. This has been received from WHO.

6.37.6 *CHETNA: A Current Health Literature Awareness Services (Qly.):* CHETNA was compiled for all issues of 1990. One thousand copies of this publication are circulated to all health science institutions in India. Till now Jan.-March issue was under distribution and April-



September was fed in the computer and October-December 1990 issue was under compilation.

**6.37.7 Highlights from Current Health Literature:** This monthly selective dissemination of information is circulated in 150 copies to keep up-to-date the Policy-makers, Planners, Administrators and Programme Implementation Officers in the field of Health Sciences at the Centre and States/UTs. This service is backed up by an efficient photocopy service to match the requirements of the recipient officers. Issues up to October 1990 have been circulated regularly.

**6.37.8 AIDSDOC: Documentation on AIDS (Monthly):** AIDSDOC is circulated in 150 copies to Officers in the DGHS and the Ministry of Health & F.W. and National AIDS Surveillance Centres in the country. Issues upto September, 1990 had been circulated. This service started in January, 1988 has generated a lot of interest among the users.

**6.37.9 Computer:** The Documentation Centre has acquired a PC/AT computer for in-house use in the NML. It is currently being used to bring out (a) Highlights; (b) AIDSDOC; and (c) CHETNA. It is also being used for computerization of the Library Catalogue.

**6.37.10 Bibliographies on 'AIDS' & Leprosy:** Selected bibliographies on 'AIDS' and 'Leprosy' were compiled by Documentation Centre and published in special issues of "Swasth Hind".

**6.37.11 Training Programmes:** The 12th Orientation Course on Health Sciences Librarianship was conducted by the NML during November/December, 1989 which included 10 participants from different Health Sciences Libraries in the country. This course was conducted on the basis of revised curriculum recommended by an Expert Committee in August, 1989.

**6.37.12 Workshops:** Two workshops in the

month of May and June, 1990 were organised to spot out the Regional Medical Libraries (RMLs), Referral Libraries (RFLs) and Resource Libraries (RLs) for developing network system in organizing and utilising the health science literature available throughout the country. The participants of the workshops were responsible officers from various health institutions and fruitful discussions took place. The recommendations of these workshops were forwarded to the authorities of Ministry of Health & F.W. for implementation. The NML was also a sponsoring body for 6th International Congress on Medical Librarianship which was convened in New Delhi in September, 1990. In addition to these, the NML is also an advisory body to the health sciences institutions who wish to develop their own library and seek expert advice in respect of staff, subjects and developing collections. During the year, 2 persons from Myanmar (Burma) took practical training-cum-observation under HELLIS Network Programme.

**6.37.13 Eighth Plan Proposals of the NML:** Eighth Plan proposals of the NML envisage a three-pronged thrust to make it an effective central axis of the National Network of Health Sciences Libraries and Information Centres in India and these are:—

- (a) developing its capabilities for collection, processing and delivery of health sciences information to meet 80% of the user's requirements from the resources available in the country;
- (b) strengthening the inter-library-linkages by establishment of 6 RMLs and supporting RFLs/RLs; and
- (c) deploying computer and communication technology for analysis, storage, retrieval and dissemination of information even to remotest field workers.

**6.37.13 (i) A Master Plan of Rs. 2,298**



lakh (Rupees 1,958 lakh under 'Revenue' and Rs. 340 lakh under 'Capital') has been proposed and includes 10 continuing and 11 new activities during the 8th Plan period. These are:—

#### *I. Continuing Activities:*

- (a) Current Indexing of Indian Health Sciences Literature.
- (b) Increased intake of publications.
- (c) Expansion of Documentation Services.
- (d) Strengthening reprography/ re-printing/microfilming services.
- (e) Computerization of library activities.
- (f) Binding and preservation.
- (g) Continuing education programmes.
- (h) Stacks expansion and furnishing.
- (i) Air-conditioning of NML.
- (j). Strengthening of information retrieval & users services.

#### *II. New Activities:*

- (a) Union catalogue of health sciences serials in Indian libraries & NML catalogue.
- (b) Retrospective indexing of Indian Health Sciences Literature.
- (c) Regional medical libraries.
- (d) Development of Distt. Health Libraries.
- (e) Construction of 2 additional floors of the NML.
- (f) Construction of the NML guest house.
- (g) Communication linkages in the HELLIS Network.
- (h) National Medical Audio-visual Resource Centre.

- (i) Procurement of staff car/3 wheeler mobile van.
- (j) Establishment of a Translation Unit.
- (k) Assistance/grants to referral/resource/medical college libraries.

#### **6.38. Other Research including research on diseases to which SC/STs are generally prone**

6.38.1 Under this Scheme, grant-in-aid is given to the institutions/voluntary bodies to undertake sample survey/research on areas pertaining mostly to public health problems/diseases which confront general masses particularly SC/STs and other socio-economically weaker sections of the population in specific fields, which are not undertaken by ICMR or any other body. The assistance is provided for a specific period keeping in view the programme and result etc.

6.38.1 The projects are undertaken by the various investigators working in PGIMER, Chandigarh, NIHF, New Delhi, NIMHANS, Bangalore and CMC, Vellore and CIP, Ranchi. At present, health survey/research is being performed on the following topics:—

1. Immune status of patients with tuberculosis and their role of immunomodulators for their treatment.
2. Trace element level and their correlation with Anthropometric nutritional parameters.
3. Epidemiological Study of Urolithiasis.
4. Epidemiology of rotavirus infection.
5. Psycho-social intervention in the treatment of Neuroses.
6. Perception of sickness and health factors responsible for acceptability pattern & performance of health services.



7. Study on health problems among the hill tribe people.
8. Emotional behavioural problems among the hill tribe people.
9. Nutritional disorders/deficiency status in children.

6.38.2 The scheme was started during the Fifth Five Year Plan. The approved outlay for this scheme for 1990-91 was Rs. 10.00 lakhs which was revised to Rs. 9.00 lakh.

### 6.39 D.G.H.S. Scholarship Scheme

6.39.1 Consequent upon the introduction of the Residency Scheme with effect from 1.1.1974, a new scheme namely 120-D.G.H.S. Scholarship Scheme now re-named D.G.H.S. Scholarship Scheme was started from 1.1.1975.

6.39.2 Under the Scheme, scholarships are awarded to students of Indian Nationality who are pursuing their studies in Post-MBBS/BDS/MSc./Ph.D. in certain selected specialities and super specialities in which adequate trained personnel are not available in the country. The subjects/specialities are reviewed from time to time on the basis of shortage keeping in view the availability of manpower in the relevant areas/fields. The existing rate of scholarship for Post-MBBS/M.Sc./Ph.D. is Rs. 850/- per month and that for post-doctoral courses is Rs. 1000/-p.m. The tenure of P.G. Scholarship is two years whereas for post doctoral courses the duration is three years.

6.39.3 Out of the total Scholarships awarded annually, 15% scholarships are reserved for candidates belonging to Scheduled Caste and 5% to Scheduled Tribe communities. In case the requisite number of candidates belonging to Scheduled Caste/Scheduled Tribe communities are not available the scholarships are awarded to other eligible candidates from the General Quota.

6.39.4 The year-wise selection of candidates is indicated below:

Year	Number of Scholarships Proposed to be awarded	Number of Scholarships actually awarded	Number of SC/ST benefitted	
			SC	ST
1979-80	120	120	4	1
1980-81	120	120	7	—
1981-82	120	96	3	3
1982-83	120	63	1	—
1983-84	120	96	6	1
1984-85	110	110	2	—
1985-86	100	100	2	—
1986-87	100	100	1	—
1987-88	100	100	2	1
1988-89	113	113	4	—
1989-90	124	124	10	4

6.39.5 The selection of the scholarship award for 1990-91 is under way.

### 6.40 North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong

6.40.1 *Introduction:* The Group of Ministers, Government of India in their meeting held on the 16th December, 1982 adopted a resolution recommending the setting up of the Institute to be known as the North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences at Shillong. The first meeting of the Governing Council was held on 22.5.87 at Delhi under the Chairmanship of Shri P.V. Narasimha Rao who was the then Health Minister and the President of the Governing Council. They decided among other things to hire the Hospital Services Consultancy Corporation of India Limited, a Public Sector Undertaking for the job of planning, construction and equipping of the Institute and to create a small number of posts consisting that of the Director, Deputy Director and some office staff. The first appointment made was that of the Deputy Director (Admn.) a member of the IAS who joined on 12th July, 1989. An officer of the same service from the



Meghalaya Cadre was also appointed as part time Director.

6.40.2 The 2nd meeting of the Governing Council was held on the 4th September, 1989 at Shillong under the Chairmanship of Shri Rafique Alam, the then Union Health Minister, where among other things, the time schedule for the development of the Institute was approved and the establishment of the 30 bedded Speciality Services Centre (at the premises to be provided by the State Government) in the two fields of Cardiology and Gastroenterology was resolved to be set up.

6.40.3 During this financial year the appointment of a full time Director was finalised.

6.40.4 The Institute had set up a Guest House at Shillong for visiting doctors, experts and officials at a rented accommodation made available by the State Government which is fully furnished now.

6.40.5 During the year, two Committees, namely (i) The Finance Committee and (ii) The Committee on Manpower Requirements have been constituted with

the approval of the Ministry of Health and Family Welfare.

6.40.6 *Speciality Services Centre:* The Malaria Institute Campus of the State Government was taken over by this Institute in October, 1989 for conversion into a Speciality Services Centre. On the advice of the Ministry of Health and Family Welfare, the North Eastern Frontier Railways was entrusted with the renovation of repair works of the three blocks under the supervision of the Hospital Services Consultancy Corporation which is a Government of India enterprise located at New Delhi. Hospital equipments for running the Speciality Services Centre have been procured through the HSCCIL at a cost of Rs. 12,00,000/-.

6.40.7 The Speciality Services Centre is however not yet commissioned as the clearance from the Ministry is being awaited.

6.40.8 *Development of the Main Complex at Mawdiang-diang:* With a total land area of 306.69 acres acquired for the Institute by the State Government, the campus is yet to be taken over by the Institute formally.



## INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY



**I**ndian Systems of Medicine (ISM) include Ayurvedā, Siddha, Unani, Tibbia, Naturopathy and Yoga. The Government of India is committed to promote these systems along with Homoeopathy as part of our total health programme. Steps initiated in this regard are: improvement in quality of education; promotion of research based primarily on the principles and philosophy of each of the system; development of medicinal plants; laying of pharmacopoeial standards and providing drug testing facilities etc.

7.1.2 There has been a gradual increase in the plan allocation both under Central and State Sectors for these systems from a mere Rs. 40 lakh in the First Five Year Plan to Rs. 129.05 crore in the VII Plan. The Central outlay also increased from Rs. 29.00 crore in the VI Plan to Rs. 43.25 crore in the VII Plan. During the VIII

Plan, the thrust will be on strengthening of ISM and Homoeopathy.

### 7.2 National Health Policy on ISM and Homoeopathy

7.2.1 The National Health Policy assigns an important role to the Indian Systems of Medicine/Homoeopathy in the delivery of Primary Health Care and envisages its eventual integration in the overall health care delivery system in the context of our national target of "Health for all by 2000 A.D.". There are about 4.91 lakh registered practitioners of Indian Systems of Medicine and Homoeopathy practising in rural and urban areas who enjoy high local acceptance and respect and consequently exert considerable influence on health beliefs and practices. In view of this, the National Health Policy stressed the need to initiate organised measures to



enable each of these systems of medicine and health care to develop in accordance with its genius. The policy further envisages that the practitioners of Indian Systems of Medicine and Homoeopathy be involved in the preventive and promotive aspects of health care within specified areas of their responsibility and functioning in the overall health care delivery system.

### 7.3 Workshops/Seminars

7.3.1 The activity of organising State level workshops was continued and more Workshops on Medicinal Plants were organised in Andhra Pradesh and West Bengal during the year.

7.3.2 A National Workshop on Medicinal Plants was also organised in New Delhi on 9th August, 1990. The objective of the Workshop was to discuss the inter-related aspects pertaining to the development of Medicinal Plants in coordination with the concerned Agencies/Departments. The workshop specifically recommended immediate steps for development of 45 identified Medicinal Plants which are in greater demand for preparation of drugs of ISM & Homoeopathy by their cultivation and research.

### 7.4 Publications

7.4.1 The Planning and Evaluation Cell under ISM & Homoeopathy Division brings out an annual publication "*Indian Systems of Medicine and Homoeopathy in India*" with all pertinent detailed information.

### 7.5 Pharmacopoeial Committees

7.5.1 Four Pharmacopoeial Committees were set up in the Ministry on Ayurvedic, Unani, Siddha and Homoeopathic systems of medicine for preparing official formularies/pharmacopoeias to maintain uniform standards in preparation of drugs and prescribe working standards for compound formulations including tests for

identifying purity and quality of the drugs.

### 7.6 Pharmacopoeial Laboratories

7.6.1 The Pharmacopoeial Laboratory for Indian Medicine (PLIM) and Homoeopathic Pharmacopoeial Laboratory (HPL) both situated in Ghaziabad are subordinate offices of the Ministry.

7.6.2 (i) *Pharmacopoeial Laboratory for Indian Medicine, Ghaziabad*: The Laboratory was established in 1970 as a standard-setting-cum-drug-testing laboratory for Indian Medicines including Ayurveda, Unani and Siddha Systems at the national level. Indian Systems of Medicine (ISM) are covered under the purview of Drugs and Cosmetics Act, 1940. The worked out standards, in the form of monographs are published by the Ministry of Health and Family Welfare, in Ayurvedic, Unani and Siddha Pharmacopoeia of India (API, UPI and SPI) respectively. The first volume of *Ayurvedic Pharmacopoeia of India* containing 80 monographs of single drugs has already been published.

7.6.2 (ii) During the year, the laboratory has worked out standards of 28 single drugs and 13 compound formulations, which have been received in the Ministry for finalisation by the Ayurvedic Pharmacopoeia Committee (APC). 30 monographs of single drugs of the Unani system have also been scrutinised for placing before the Unani Pharmacopoeia Committee for approval.

7.6.2 (iii) The Director of the Laboratory has been notified as Govt. Analyst for the purpose of testing of Indian Medicine for various States and Union Territories. Four States namely Karnataka, Tripura, Manipur and Orissa have also notified the Director as Govt. Analyst for their States for testing Indian Medicines.

7.6.2 (iv) Two All-India Level Orientation Lecture Programmes have been organised



for Drug Inspectors/Drug Analysts to impart knowledge in Indian Drugs Control practices. One Govt. Analysts' meeting on All India basis was also organised to discuss various problems faced during analysis.

7.6.2 (v) Modern Analytical techniques under computerised control available in the laboratory are Atomic Absorption Spectrophotometry, UV Spectrophotometry, Gas-liquid Chromatography and T.L.C. Scanning.

7.6.3 (i) *Homoeopathic Pharmacopoeia Laboratory, Ghaziabad*: Founded in 1975, Homoeopathic Pharmacopoeia Laboratory is a high technology-based standard setting-cum-drug testing laboratory for homoeopathic medicines at the National level. Homoeopathic medicines are covered under the purview of Drugs & Cosmetics Act, 1940. Worked out standards are released by the Ministry in the form of Homoeopathic Pharmacopoeia of India (HPI). The laboratory has released recommendatory standards for 125 raw materials and 304 finished products.

7.6.3 (ii) During the year, the laboratory completed fixation of standards for 23 basic drugs against a target of 25; 26 Finished Product Standards against a target of 25, Drug Testing of 159 Survey Samples against a target of 100 and completion of Drug Testing of 716 referred samples. Higher output has been achieved with the infusion of modern technology, computers and micro-processor based analytical instruments.

7.6.3 (iii) In addition to referred samples which were analysed under Drugs & Cosmetics Act & Rules, the laboratory examined samples for quality monitoring, detection of adulteration and misbranding etc. with the aim of suggesting measures to prevent them. The laboratory maintains a medicinal plant garden where rare and exotic medicinal plants are cultivated and preserved. A seed-bank of rare and exotic plants is also functioning.

7.6.3 (iv) A computer based data bank helped in dissemination of technical information against 186 references. Updating of data banks was also undertaken. The total number of documentation folders was 4557. The institute maintains a library with abstracting and documentation facilities.

7.6.3 (v) The laboratory organised a number of workshops & symposia in collaboration with other agencies. It had also organised eight pharmacy orientation lecture programmes for the State Govt. Drug Inspectors & Drug Analysts at all India level & Medical Officers of Uttar Pradesh. It had screened formulations for the purpose of Drugs Act in 163 cases. Professionals from various institutes, lecturers of homoeopathic colleges and students were exposed to the modern technology of drug testing to achieve integrated quality development at different levels. The Institute attracts scientists from all over India and abroad for its modern approach to drug testing. It released a booklet "Pursuit of Knowledge"-Vol. I containing the different methods of drug processing, control and regulatory provisions over them.

## 7.7 Regulation of Educational Standards and Professional Practice

7.7.1 There are two Councils; viz. (i) Central Council of Indian Medicine (CCIM) and (ii) Central Council of Homoeopathy (CCH) responsible to lay down and maintaining uniform standards of education and regulate the professional practice of the practitioners in the field of ISM and Homoeopathy respectively.

7.7.2 (i) *Central Council of Indian Medicine*:—The Central Council of Indian Medicine is a statutory body constituted under the Indian Medicine Central Council Act (IMCC Act) 1970. The first Council was nominated by the Government of India in 1971. The Council was reconstituted in 1984 vide Government of India notification dated 7.5.84.



7.7.2 (ii) It is responsible for laying down and maintaining uniform standards of education in Ayurveda, Siddha and Unani and for regulating practice in these fields under the provisions of the IMCC Act, 1970.

7.7.2 (iii) The budget allocation of the Council for the year 1990-91 is as under:—

Non-Plan	Rs. 14.40 lakh
Plan	Rs. 5.50 lakh

7.7.3 (i) *Central Council of Homoeopathy*:— The Central Council of Homoeopathy is constituted under the Homoeopathy Central Council (HCC) Act, 1973 to maintain and regulate uniform standards of education, maintenance of Central Register of Homoeopathy and associated matters.

7.7.3 (ii) The Central Council has sent its recommendations to the Ministry of Health & Family Welfare for inclusion of the following medical qualifications in Homoeopathy in Second Schedule:—

1. University of Bombay, Bombay	BHMS	From 1988 to 1990
2. Karnataka Board of Homoeopathy, Bangalore.	BHMS	From 1985 onwards
3. Agra University, Agra.	BMS	From 1981 onwards

7.7.3 (iii) The Central Council has approved seven Homoeopathic Medical Colleges in the States of Andhra Pradesh, Kerala, Maharashtra, Orissa and Rajasthan for imparting training in P.G. degree courses in Homoeopathic subjects as per Homoeopathy (Post Graduate Degree Courses), M.D. (Hon.) Regulations, 1989 subject to further improvements. The concerned State authorities and Universities have been intimated accordingly.

7.7.3 (iv) The budget allocation for the Central Council for 1990-91 is as under:—

Plan	: Rs. 5.00 lakh
Non-Plan	: Rs. 15.50 lakh

## 7.8 Apex Bodies for Research

7.8.1 The Four Research Councils viz. (i) Central Council for Research in Ayurveda and Siddha (CCRAS); (ii) Central Council for Research in Unani Medicine (CCRUM); (iii) Central Council for Research in Homoeopathy (CCRH); and (iv) Central Council for Research in Yoga and Naturopathy (CCRYN) continued to initiate, aid, guide, develop and coordinate scientific research in different aspects of the respective systems both fundamental and applied. These Councils are the apex bodies for research in the concerned system of medicine and are fully financed by the Government of India.

7.8.2 (i) *Central Council for Research in Ayurveda and Siddha*:—The Central Council for Research in Ayurveda and Siddha continued its activities through the network of Research Institutes and Centres functioning under its direct control and through a number of units/enquiries located in Universities, Ayurveda/Siddha and Modern Medical Colleges etc. in different parts of the country. The Scientific Advisory Committees (Ayurveda & Siddha) have reviewed the research studies carried out by these Institutes/Centres/Units/Enquiry and recommended for further continuation of the work being carried out by them. Continued efforts are in process to augment the research activities to achieve the goal of "Health for All by 2000 A.D." providing medicare assistance indirectly while implementing various research programmes.

7.8.2 (ii) *Health Care Research Studies* in the Council includes Service Oriented Survey and Surveillance screening Programme, Community Health Care



Research Programme and Tribal Health Care Research Programme. These Programmes are modulated to have a rural bias so that benefits of research studies carried out reach the grass root level. Most of the villages/tribal pockets selected for these programmes neither have any medical facility nor were covered under any of these three programmes earlier. Under these programmes teams of Physicians and Paramedical Staff contact each and every house in the Village/tribal pockets selected for study. Patients detected during these contacts are examined and extended medical aid at their doorsteps. The physicians also try to educate them through group discussions on oral hygiene and preventive measures for maintenance of positive health besides acquainting them with the herbs locally available together with their uses so that many of the common ailments may be treated by locally available resources. A large number of SC/ST and economically backward population derive benefits through these programmes. While benefiting the rural/tribal population at large, useful data pertaining to the nature and frequency of the prevalent diseases, food habits with regard to different seasons, Socio-Economic factors, natural resources, and folk medical claims prevalent in the area are also collected. The Council is also carrying out clinical and Literary Research Work on Amchi System of Medicine at its Amchi Research Unit, Leh, Ladakh.

7.8.2 (iii) *Medico Botanical Survey*: Medico Botanical Surveys in the Council include collection and supply of medicinal plants, their identification, locating the zones of distribution of particular Ayurvedic and Siddha Drugs, extent of availability and the market Survey for their possible adulterants and substitutes. The Survey teams have explored a vast forest area and at present efforts are in process to compile the entire information collected so far for making it suitable for publication. The Council has four Medicinal Plant Gardens located at Jhansi,

Tarikhet, Pune and Mangliawas for demonstrative, experimental as well as small scale cultivation of medicinal plants; such plants should find immense use in Ayurveda and Siddha System of Medicine in general and which are used for clinical and other ancillary studies of the Council's Research Projects in particular.

7.8.2 (iv) Breeding of musk deer in captivity at musk deer breeding farm Maharuri is in progress and at present there are 22 animals of different age and sex.

7.8.2 (iv) *Literary Research*: Literary Research Programmes being carried out in the Council include medico historical studies, collection of "subjectwise references from ancient classical literature, lexicographic works, published literature in Ayurveda, Siddha and Modern Medicine besides the revival and publication of abstracts and Documentation of 800 post graduate thesis of Ayurveda at State Ayurveda College, Lucknow and Banaras Hindu University, Varanasi, has been carried out. Translation and editing of some other ancient manuscripts including Shasra Yoga and Abhinav Chintaman have been completed and the Sahasra Yoga has been released.

7.8.2 (v) *Publications*: The Council is publishing the quarterly "*Journal of Research in Ayurveda and Siddha*", "*Bulletin of Medico Ethno Botanical Research*", "*Bulletin of Institute of History of Medicine*" and Monthly/Bi-monthly Newsletters. The Council has published one Monograph and 6 others are under print based on Clinical, Drug and Literary research studies including Histriographical studies.

7.8.2 (vi) *Family Welfare Research Programmes*: The Council has been conducting clinical trials and chemico-pharmacological studies on plants/plant products to identify their anti-fertility potential. Further clinical trials have been carried out in the clinical Research Units at Bombay, Calcutta, Jaipur, Varanasi, Lucknow, Patiala, Madras, Ahmedabad and Trivandrum on 311 new subjects



while follow up studies have been continuing on 438 subjects.

7.8.3 (i) *Central Council for Research in Unani Medicine*: The Central Council for Research in Unani Medicine continued its research activities in clinical research, drug research, literary research and survey and cultivation of medicinal plants. Besides, the Family Welfare research programme was also continued. These activities were carried out through a network of 30 Institutes/Units functioning in different parts of the country under the Council. These include a Central Research Instt. of Unani Medicine at Hyderabad, seven Regional Research Institutes of Unani Medicine—one each at Madras, Bhadrak, Patna, Lucknow, Aligarh, Srinagar and Bombay, 11 Clinical Research Units—two at New Delhi and one each at Allahabad, Karimganj, Kurnool, Bangalore, Bhopal, Calcutta Edathalla (Kerala). Meerut, U.P. and Burhanpur (M.P.), five Drug Standardisation Research Units—one each at New Delhi, Hyderabad, Madras, Bangalore and Lucknow, a Literary Research Institute at New Delhi, a Central Herb Garden and Museum at Lucknow, two Family Welfare Research Units—one each at Hyderabad and Bombay, a Chemical Research Unit at Aligarh and an Information Centre at New Delhi. During the reporting period, the main emphasis was on consolidation and finalisation of the work carried out in different research schemes of the Council.

7.8.3 (ii) Under the Clinical Research Programme, clinical and therapeutic studies were continued on some common and chronic ailments with special emphasis on diseases whose eradication is accorded national priority.

7.8.3 (iii) During the reporting period, 4,255 research cases were registered for studies in various problems at different centres of the Council. 3,895 cases were registered in OPDs whereas 360 cases were admitted as indoor patients. Therapeutic trials conducted particularly

in the problem of Wajaul Mafasil (Rheumatoid arthritis), Iltehab-e-kabid (Infective hepatitis), Iltehab-e-Tajaweef Anf (Sinusitis) Irqe-e-Madani (Guinea worm) and Ishal-e-Atfal (infantile diarrhoea) yielded highly significant result. Preliminary prophylactic trial on Irqe-e-Madani (Guinea worm) was also completed during the reporting period.

7.8.3 (iv) Studies were also continued on the theory of Akhlat (Humours) and regimantal therapy of cuppling.

7.8.3 (v) General OPD programme was continued at different centres of the Council. The aim of the programme is to provide free medicare to the patients suffering from different common ailments. Patients attending the OPD are treated with Unani Kit Medicines. This programme was continued at 13 centres of the Council. During the reporting period, 62,544 cases of common ailments were treated. Significant response of Unani Kit Medicines was observed for different common ailments.

7.8.3(vi) The Mobile Clinical Research Programme of the council is aimed at providing free medicare to the rural masses, especially the Scheduled Castes, Scheduled Tribes and other weaker sections of the society nearer to their door steps and getting research feedback. Under this programme during the period a total population of 2,70,000 including 1,08,000 persons belonging to Scheduled Castes and 4,500 belonging to Scheduled Tribes was covered in 24 villages/urban slums. A total of 30,560 cases of common ailments were treated in 470 mobile visits at different mobile OPDs.

7.8.3 (vii) Under the School Health Programme, 1,500 school children underwent medical check up during the reporting period.

7.8.3 (viii) Under the Drug Standardisation Research Programme, standardisation of 20 single drugs and 24 compound for



ulations was completed during the reporting period. The Council has so far been able to standardise 133 single drugs and 320 compound formulations. Standardisation work on method manufacture of one compound formulation was also undertaken.

7.8.3 (ix) Under the Survey and Cultivation of Medicinal Plants Programme, the Forest Division of Hyderabad and Medak (Andhra Pradesh), Nasik and Aurangabad (Maharashtra), Athgarh (Orissa), Hazaribagh (Bihar), Bankura (West Bengal) and Gorakapur (U.P.) were surveyed for their medicobotanical explorations. A total of 1819 plant specimens were collected. Out of these 1658 specimens were provisionally identified. Eight hundred herbarium sheets were mounted and preserved in the museum. Five hundred and thirty one folk lores for different common ailments were collected and sixty eight authentic drug samples were also collected during these surveys. The Information Centre continued the publication of the quarterly "News-letter" besides the book entitled 'A Handbook of Common Remedies in Unani System of Medicine' in Oriya and the Urdu translation of Uyoonaal-Amba fi-talaqatil Atibba Vol. I were also published by the centre during the reporting period.

7.8.3 (x) Two hundred new volumes on Unani medicine and allied sciences were added to the existing stock of the Library. At present there are 3800 books on Unani Medicine and allied sciences. Besides 13 rare manuscripts, 8 microfilms and 18 photocopies of the rare manuscripts are also available in the library.

7.8.3 (xi) The Council organised the Sixth Scientific Seminar on Unani Medicine in October, 90 at New Delhi.

7.8.3 (xii) *Unani Drugs on Oral Contraception*: The Central Council for Research in Unani Medicine has, *inter alia*, taken up programmes to clinically screen some unani drugs described in the Unani

classics as oral contraceptive agents. The objective of the programme is to find out potent and economically cheap contraceptive agents free from side effects. This programme is being carried out through two Family Welfare Research Units, one each at Hyderabad and Bombay. During the reporting period, trials of four coded unani oral contraceptive agents were continued. A total of 2400 eligible couples were motivated, out of these, 105 cases were registered for clinical screening. One hundred and thirty eight active cases continued from the previous year bringing a total of 243 cases studied during the reporting period. The studies carried out so far have revealed that these drugs are effective in ensuring increase in the inter pregnancy period in those women of reproductive age group who hitherto did not have access to other conventional Family Planning Methods.

7.8.3 (xiii) The Council's Family Welfare Programme is a good source of motivation and propagation of Family Welfare measures in general and birth control in particular.

7.8.3 (xiv) Budget: The budget allocation for the Council for 1990-91 is as here under:-

Plan . . . -Rs. 150.00 lakh  
Non-Plan -Rs. 170.00 lakh

7.8.4 (i) *Central Council for Research in Homoeopathy*: The Central Council for Research in Homoeopathy is a premier organisation in the country engaged in systematic and scientific research in Homoeopathy. It was constituted on the 30th March, 1978 as an autonomous organisation under the Ministry of Health and Family Welfare after dissolution of the then Central Council for Research in Indian Medicine and Homoeopathy. The Council started functioning as an independent organisation with effect from January, 1979. During the last decade, the Council has made steady progress towards furtherance of the objectives set out for it. It has, during the years, established a



network of 51 Institutes/Units located in various parts of the country. The Council continued its activities in Clinical Research (including Tribal and Epidemics), Clinical Verification, Drug Proving, Drug Research and Standardisation including Survey and collection of Medicinal Plants, Literary Research and Documentation (including publications).

7.8.4 (ii) Clinical Research studies have been divided into two parts viz. Disease oriented and Drug oriented. Thirty five (35) Clinical Research Projects are in progress at four Research Institutes, fifteen Clinical Research Units and one Clinical Research Unit (Tribal), Sambalpur (Orissa). Two projects viz. on AIDS and Filaria are in progress in collaboration with Indian Council of Medical Research (ICMR).

7.8.4 (iii) Disease Oriented clinical research studies have been undertaken on the following : AIDS, Allergic Rhinitis, Amoebiasis, Behavioural Disorders, Bronchial Asthma, Cervicitis & Cervical Erosion, Diabetes Mellitus, Drug De-addiction, Dysentery, Epilepsy, Filaria, Malaria, Malignant Diseases, Osteoarthritis, Renal Calculi, Rheumatoid Arthritis, Peptic Ulcer, Sickle Cell Anaemia, Sinusitis, Skin Disorders (Allergic Dermatitis, Urticaria, Psoriasis etc.), Tonsillitis and Vitiligo. Drug disease oriented Clinical Research studies have been undertaken on Amoebiasis, Behavioural disorders, Bronchial Asthma, Cervical Erosion & Cervicitis, Diabetes Mellitus, Filaria, Gall Stones, Helminthiasis Intermittent Fever, Malignant Diseases, Malposition of Human Foetus, Menorrhagia and Vitiligo.

7.8.4 (iv) *Clinical Research in Epidemics:* The Council has undertaken treatment-cum-research studies in epidemics of Meningitis at Sagar (M.P.) and Gastritis at Krishna District (A.P.) in May-June, 1990. The treatment-cum-research study on Kala-Azar started in January, 1989 has been continued during this period. Fol-

low-up-cases which had been under observation show encouraging results.

7.8.4 (v) *Clinical Research in Tribal Areas:* The Council has 22 Tribal Units in various tribal pockets of India. Some of the tribal units have completed the survey of the tribal population and also identified the most common prevalent diseases in the tribal pockets. These Units have been assigned Drug Oriented Clinical Research on these diseases besides continuing the survey and providing medical aid to the tribals at the their doorsteps through camps. From April to Sept., 1990, 19,723 tribal population has been surveyed and incidental medicare has been provided to 949 tribals. Under the various drug oriented clinical research projects 1393 cases have been registered for study.

7.8.4 (vi) *Clinical Verification Research:* The Council continued to verify clinically the data of sixty two (62) drugs. This includes the sixteen (16) drugs proved by the Council and most of the proving data has been verified through Clinical confirmation. Some additional symptoms have also been found to be relieved. These clinical symptoms have been noted and need to be further confirmed/verified for addition to the available symptomatology of that particular drug.

7.8.4 (vii) *Drug Proving Research Programme:* Drug Proving Research Programme is of continuous nature and is being undertaken at 7 Institutes/Units of the Council. So far, 29 drugs have been proved by the Council. The data of 4 drugs along with clinically verified symptoms has been published in the form of Monographs, and of 18 drugs in the Quarterly Bulletin of the Council.

7.8.4 (viii) The proving of 2 drugs has been completed and 2 drugs are under progress during the period under report.

7.8.4 (ix) *Drug Research Studies:* The Drug Research Studies include drug standardisation (quality control), survey and



collection of medicinal Plants and advance research studies for potency estimation of homoeopathic potencies.

7.8.4 (x) The Drug standardisation studies i.e. Pharmacognostic, physico-chemical and pharmacological have been conducted in respect of 18, 12 and 8 drugs respectively during the period under report.

7.8.4 (xi) *Medicinal Plants Survey*: The Survey and Collection of Medicinal Plants Unit at Ooty has conducted 14 survey tours and collected 204 field numbers thus taking the total to 3,598 during the period under report. 14 raw drugs have been supplied to the Institutes/Units of the Council where the drug standardisation studies are being conducted.

7.8.4 (xii) *Literary Research Programme*: Under the Literary Research Programme the review and revision of Kent's Repertory, additions from Boericke's Repertory in relation to other works, compilation of homeopathic therapeutics and additions to Kent's Repertory from Boger Boenninghausen's Repertory are being carried out. Under the project, review and revision of Kent's Repertory work on the Chapters Mind, Eyes, and Respiratory System is in progress.

7.8.4 (xiii) *Computerisation*: With the procurement of Computers, data related to Clinical Research, Clinical Verification, Drug Proving, Literary Research and Documentation is fed into the computer from time to time for easy retrieval, processing and monitoring of data.

7.8.4 (xiv) *Publications*: Two periodicals are being published regularly by the Council viz. (*Quarterly Bulletin*) and (*CCRH News*). One issue of each of these publications has been published. Issues of *Quarterly Bulletins* published contain various articles presented at the Workshop on AIDS organised by the Council

and the next issue is the Drug Proving Special II containing the data on 6 drugs proved by the Council.

7.8.4 (xv) A booklet entitled "MOUTH" is under publication.

7.8.4 (xvi) *Budget*: The budget allocation for the Council for 1990-91 is as under:—

Plan	Rs. 100.00 lakh
Non-Plan	Rs. 98.00 lakh

7.8.5 (i) *Central Council for Research in Yoga & Naturopathy (CCRYN)*: The Council is a society registered under the Societies Registration Act of 1860 with the object of providing assistance for research in Yoga and Naturopathy. As this Council is the only agency set up under the Ministry of Health & Family Welfare for promoting Yoga and Nature Cure, it is looking after education and training too.

7.8.5 (ii) The major activities of this Council are presently limited to giving grants-in-aid to voluntary Yoga and Nature Cure institutions, for research oriented schemes and nature cure programmes.

7.8.5 (iii) The budget allocation of the Council for 1990-91 is as under:—

Plan	Rs. 20.00 lakh
Non-Plan	Rs. 6.00 lakh

7.8.6 (i) *Central Research Institute for Yoga, New Delhi*: CRIY was established in 1976, with the major objectives of conducting clinical, fundamental and literary research and providing yogic treatment to patients. The major emphasis of clinical research has been on (i) Diabetes mellitus, (ii) Bronchial asthma, (iii) Gastro-intestinal disorders, (iv) Arthritis, (v) Obesity and (vi) Sinusitis.

7.8.6 (ii) Apart from these on-going clinical studies and treatment of patients,



studies on prevention of diseases by yoga have also been taken up through studies on the effect of Yoga on blood sugar and haemoglobin levels in diabetics, non-diabetics and subjects with potential risks of developing diabetes.

7.8.6 (iii) The institute has also been imparting short-term Yoga training.

7.8.6 (iv) The activities of Central Research Institute for Yoga remained virtually at a stand-still for most of 1990 owing to internal administrative and managerial problems. On 10.12.1990, the CRIY President appointed a Chief Administrative Officer in this institute to revive its activities. The above activities were gradually revived on 19.12.1990 in this institute.

7.8.6 (v) The details of the budget allocations made under Plan and Non-Plan during 1990-91 are as under:—

Plan	Rs. 30.00 lakh
Non-Plan	Rs. 19.00 lakh

A sum of Rs. 5.00 lakh and Rs. 10.00 lakh have been sanctioned under Plan and non-Plan respectively during the period.

7.8.7 (i) *Rashtriya Ayurveda Vidyapeeth, New Delhi*: The Rashtriya Ayurveda Vidyapeeth, New Delhi, an autonomous body, funded fully by the Ministry of Health and Family Welfare, has been set up and registered under the REGISTRATION OF SOCIETIES ACT, 1860 in Delhi on 11th Feb., 1988.

7.8.7 (ii) The objectives of the Vidyapeeth are to recognise and award fellowships and memberships to the practitioners of Ayurveda, particularly those traditionally trained but having outstanding knowledge and enjoying wide practice. The Vidyapeeth will also be undertaking activities for continuing education, organising workshops and seminars to spread knowledge of Ayurveda and maintain excellence in its practice. The Vidyapeeth will

award membership to those candidates who are successful in the examination organised by the Vidyapeeth. The Vidyapeeth also appoints Gurus for various disciplines and a maximum of 5 scholars are allowed to undergo extensive training in the subject under the Guru. The Governing Body of the Vidyapeeth has already been constituted.

## 7.9. National Institutes

7.9.1 The four National Institutes viz.

(i) National Institute of Ayurveda, Jaipur, (ii) National Institute of Homoeopathy, Calcutta, (iii) National Institute of Unani Medicine, Bangalore and (iv) National Institute of Naturopathy, Pune are Autonomous Organisations under the Ministry of Health and Family Welfare.

7.9.2 (i) *National Institute of Ayurveda, Jaipur*: The National Institute of Ayurveda was established on 7th February, 1976 at Jaipur by the Government of India in collaboration with the Government of Rajasthan as an apex Institution of Ayurveda in the country to develop high standards of teaching, training and research in all aspects of the Ayurvedic System of Medicine with a Scientific approach.

7.9.2 (ii) The Institute has been engaged in teaching, training and research at Under-graduate and Post-graduate levels and also gives guidance for Ph.D. in Ayurveda through its affiliation with the University of Rajasthan.

7.9.2 (iii) The Institute has its own Pharmacy in which 118 varieties of medicines worth Rs. 5.18 lakh were manufactured during the year and were used for distribution to Patients in the out-door and in-door Hospitals of the Institute.

7.9.2 (iv) The Institute has two Hospitals along with a separate Maternity and Child Welfare Centre having a bed strength of 200. During the year, 53,000 old patients were treated at out-door level



and 2,000 new patients and 42,000 old patients at the in-door level. Under the Centrally sponsored scheme of Medical Aid to Scheduled Caste and Scheduled Tribe Areas including Economically Backward Areas, 8 Medical Aid Camps were organised in Udaipur Division during the year in which 1.18 lakh patients were treated. Medicines were supplied free of cost and Rs. 2.40 lakh was spent on organising these camps. Two camps on Panchkarma were organised in the Institute campus in which 2826 patients were treated.

7.9.2 (v) The budget allocation of the Institute for 1990-91 is Rs. 90.00 lakh under Plan and Rs. 175.00 lakh under Non-Plan.

7.9.3 (i) *National Institute of Homoeopathy, Calcutta*: The National Institute of Homoeopathy, Calcutta was established on the December 10, 1975 as an autonomous organisation under the Ministry of Health and Family Welfare, Government of India. It was visualised to serve as a model teaching and research institute for advancement in Homoeopathy. It is situated in Salt Lake City, Calcutta, covering an area of 16 acres of land. Besides, it has 20 acres of land at Salt Lake City for construction of staff quarters and 24 acres of land at Kalyani (in District Nadia, West Bengal) for development of a herbal garden for preparation of homoeopathic medicines.

7.9.3 (ii) The main objectives of the Institute are :—

1. to promote the growth and development of homoeopathy;
2. to ensure manpower development by providing (a) Graduates and post-graduates training facilities in homoeopathy and (b) Paramedical staff by introducing Pharmacy and dispenser's courses and an orientation course in homoeopathy for nurses;

3. to conduct refresher or orientation courses for teachers and homoeopathic medical practitioners for their qualitative improvement;
4. to conduct both fundamental and clinical research in homoeopathy; to identify the common ailments encountered by people in different geographical locations in the country and evolve both preventive and curative medical care services to suffering humanity; and
5. to publish technical journals and periodicals, in the form of news letters, technical reviews etc. to keep pace with the latest developments in the field of homoeopathy and to serve as a regional data Bank for making available the necessary information for teachers and research workers in Homoeopathy.

7.9.3 (iii) The Academic activities of the Institution include not only theoretical, practical and tutorial classes but also regular seminars where students get ample scope for furthering their knowledge through exchange of ideas. Although the Institution presently maintains its academic and patient care activities by engaging highly qualified and experienced teachers in the different disciplines as honorary faculty members, their performances compare favourably with those having full-time staff. However, the Institute has been making all out endeavour to engage 34 full-time faculty members.

7.9.3 (iv) Presently, the Institute conducts two different courses viz. (i) Bachelor of Homoeopathic Medicine and Surgery (B.H.M.S.), affiliated to Calcutta University; and (ii) Post Diploma Course in Homoeopathy (Dip. N.I.H.), comparable to the graded Degree Course.

7.9.3 (v) The B.H.M.S. Course was started in December, 1977 and is of 5½ years duration (including one year's compulsory



internship training). Students possessing Higher Secondary (10+2) qualification with English, Physics, Chemistry (Organic & Inorganic), Biology (Zoology & Botany) are eligible for admission. In the initial year, only 25 students had been admitted to the first year B.H.M.S. Course.

7.9 (vi) The Second one is a post diploma course of two years duration, viz. Dip. N.I.H., available to students who have already passed the D.M.S./D.H.M.S. Course after 4 years institutional training. Dip. N.I.H. is a recognised qualification by the Central Council of Homoeopathy and the Course has been included in the Second Schedule of Homoeopathy Central Council Act, 1973. The intake capacity is 25 students per year and the students receive a stipend at the rate of Rs. 750/- per month.

7.9.3 (vii) In consideration of pressing demands for adequately trained teachers, research workers, technical personnel for the Regional Drug Testing Laboratories of our country, meant for standardisation and quality control of Homoeopathic Medicines; and to ensure supply of adequately trained medical administrators to maintain uniform standards in the homoeopathic hospitals in our country, a variety of courses have been proposed during the Eighth Five Year Plan period. The Institute plans to introduce M.D. Course in Homoeopathy. Necessary expertise required to conduct the course is already available with the Institute.

7.9.3 (viii) One Mobile Unit has been providing free medical treatment to the economically weaker and backward community of the locality and 44,994 patients have been treated up to Oct. 90.

7.9.3 (ix) Besides some other studies, the Institute has undertaken the following

three investigations during the period under report :

- (1) Investigation of mental retardation in children for in-born errors of metabolism.
- (2) Investigation of Lectins.
- (3) Study of immunological parameters with anti Psoric drugs.

7.9.3 (x) The Library of the National Institute of Homoeopathy is probably the largest homoeopathic medical library in India. The Library's services are utilised mainly by students, teachers and research workers of the Institute as well as Homoeo-research workers from institutions located in Calcutta.

7.9.3 (xi) Ninety-four books were added to the institute library which has subscribed twenty-seven journals during 1990. An additional six are received on complimentary basis. There are 636 volumes of journals available in the library.

7.9.3 (xii) In addition to the regular services previously offered, i.e. loan, reference, bibliographic, S.D.I., inter-library loan, etc. a few more facilities have been introduced.

7.9.3 (xiii) The purchase of a video cassette recorder has enabled the medical library to hold regular video shows on various medical and allied subjects. Cassettes are taken on loan regularly from the British Council Library, Calcutta and by post from the British Council Film and Video Library, Bombay.

7.9.3 (xiv) Five acres of herb land at Kalyani has been cultivated once and the cost of inputs for cultivation has been compensated to the tune of about 30%.

7.9.3 (xv) About 42 species of medicinal plants have been grown as herbarium specimens. To acclimatise the exotic



species of medicinal plants a comprehensive programme has been initiated in collaboration with Calcutta University, Bidhan Chandra Krishi Viswavidyalaya and the Directorate of Medicinal Plants, Government of West Bengal. *Lilium tig* and *phytolacca americana*, despite surviving summer conditions, showed poor growth in the Bengal Plains. *Chelidonium majus* did not survive the summer temperature in Kalyani.

7.9.3 (xvi) The budget allocation for the Institute for the current financial year 1990-91 is as under :—

Plan	:	Rs. 70.00 lakh
Non-Plan	:	Rs. 29.00 lakh

7.9.4 (i) *National Institute of Unani Medicine, Bangalore*: Consequent to the decision of the Government of India to establish a Unani Institute at the National level in collaboration with the Government of Karnataka, the National Institute of Unani Medicine has been set up and registered as an autonomous body under the Karnataka Societies Registration Act 1960 (Karnataka Act. No. 17 of 1960).

7.9.4 (ii) The Government of Karnataka has allotted 55 acres and 2 guntas of land free of cost in the vicinity of Bangalore City at Bangalore Magadi Road for construction of the building and raising of a herb garden for the Institute. The barbed wire fencing work around the land has been executed by the Central Public Works Department at a total cost of Rs. 1,83,120.

7.9.4 (iii) The Architect of the Directorate General of Health Services, New Delhi inspected the site for the National Institute of Unani Medicine, Bangalore during February 1990. After detailed discussions on 21-2-1990 with the Architect, Directorate General of Health Services, New Delhi, and with the officers of the Institute and the CPWD Bangalore, the final requirements for construction of buildings have been prepared and handed

over to the Architect for taking up the design work. The design and plans for the construction of buildings is under finalisation.

7.9.4 (iv) As per the decision taken in the second meeting of the Governing Body, one post of Horticultural Assistant and two posts of Gardeners were created for the establishment of the Herb Garden. The posts sanctioned for the Herb Garden, will be filled up after the finalisation of the Layout plan of the Institute.

7.9.4 (v) In pursuance of the decision of the Governing Body in its meeting held on 18-9-1990, a Sub-Committee and an Ad-hoc Committee under the Chairmanship of the Health Secretary, Government of Karnataka was set up to examine proper utilisation of land allotted by the Government of Karnataka and preparation of a project report for starting under-graduate college and to submit a report. The Sub-Committee met once during March 1990 and approved the requirements of accommodation as projected for various branches of the Institute with slight modification as suggested to the Architect of the Directorate General of Health Services, New Delhi. The Ad-hoc Committee met once during March 1990 and prepared the scheme, syllabus, requirements of staff and library, etc., for starting the under-graduate course in the College and the 100 bedded Hospital as per the pattern prescribed by the Central Council of Indian Medicine, New Delhi. The report of the Ad-hoc Committee was submitted to the Ministry of Health and Family Welfare, New Delhi for approval. The reports submitted by the Sub-committee and Ad-hoc Committee will be placed for approval in the next meeting of the Governing Body. The Institute is expected to start its activities in the near future.

7.9.5 (i) *National Institute of Naturopathy, Pune*: NIN, Pune was registered as an autonomous body under the Societies Registration Act, 1860 for promotion of Naturopathy as a system of



medicine and to encourage research in all aspects concerning human personality and in all fields of nature cure as a way of life as well as for cure of chronic ailments and prevention of diseases.

7.9.5 (ii) The sanctioned budget of the Institute for 1990-91 is Rs. 15.00 lakh under Plan.

#### 7.10. Post-Graduate Centres and Departments

7.10.1 Besides other Post-graduate Centres and Departments, the National Institute of Ayurveda, Jaipur, the Gujarat Ayurveda University, Jamnagar and the Banaras Hindu University, Varanasi have full fledged Post-graduate facilities in Ayurveda.

7.10.2 (i) *Institute of Post-graduate Teaching and Research, Gujarat Ayurved University, Jamnagar:* The Institute of Post-graduate Teaching and Research, Jamnagar (IPGT&R) is an integral part of the Gujarat Ayurved University established under Gujarat State Act in 1965. The Institute is fully financed by the Central Government through grants for its maintenance and development. The Institute imparts Post-graduate teaching/training and facilities for research in different branches of Ayurvedic Medicines and Allied Subjects. It has an admission capacity of 30 M.D. students every year. The Institute is composed of six teaching departments, five research laboratories and the complex of 3 hospitals with a bed strength of 150 beds. At the instance of the Government of India provision has been made for 5 seats for teacher candidates from places where there are no facilities for Post-graduate studies in Ayurveda at present. The Institute also provides facilities for Ph.D. research work.

7.10.2 (i) A Budget provision of Rs. 116 lakh and Rs. 60 lakh has been made under Non-Plan and Plan schemes respectively for the Institute during 1990-91.

#### 7.11 Upgrading Departments in State Government Colleges etc. for Post-graduate, Training and Research in ISM

7.11.1 (i) Upgrading of Departments in State Government Colleges of Indian Medicine for imparting Post-graduate education was taken up as a Centrally sponsored scheme during the 4th Five Year Plan. Since then, 31 departments in Ayurveda, Unani and Siddha have been upgraded for imparting Post-graduate education till the end of the 7th Five Year Plan. It is proposed to continue this scheme during the current Plan. However, assistance will be limited to upgrading new Departments only in the State run colleges etc. during the current Plan. The State Governments have been addressed in the matter and have been requested to forward applications from eligible institutions for upgrading of new departments.

7.11.1 (ii) A provision of Rs. 100 lakh has been made for this scheme during 1990-91.

7.11.2 (i) *Strengthening of Upgraded Post-graduate Departments of Kulliyat and Moalijat in A.K. Tibbiya College and New Schemes therein:* Post-graduate education in Unani Medicine was started in 1972-73 under a purely Central Scheme by upgrading department of Ilmul Advia in the A.K. Tibbiya College, Aligarh Muslim University, Aligarh. This Department is presently funded through UGC.

7.11.2 (ii) Two other departments, namely, Kulliyat and Moalijat were upgraded for post-graduate education and research during 1986-87 in the college. Grants-in-aid were being released for development of these two departments since March, 1987. During the current Plan while the maintenance of these two upgraded departments will be through UGC, there is a proposal to strengthen these two departments and also take up a few other development schemes in the college.



## **7.12 Establishment of 7 Regional Drug Testing Laboratories of ISM and Homoeopathy**

7.12.1 (i) A proposal to establish few Regional Drug Testing Laboratories of ISM and Homoeopathy in different regions of the country has been taken up as a new scheme of the current plan for consideration. The scheme aims at providing facilities for testing of drugs belonging to ISM/Homoeopathy in different regions of the country so that the quality control machinery is strengthened and the testing of drugs of ISM/Homoeopathy is done more effectively and uniformly throughout the country. The proposed project period is 5 years from 1991 onwards at a cost of Rs. 319.25 lakh.

7.12.1 (ii) A provision of Rs. 40.00 lakh has been made for this scheme during 1990-91.

## **7.13 Grants-in-aid to the ISM & H Colleges run by Voluntary Organisations and taken over by State/UT Governments**

7.13.1 One time Central Assistance is provided to the extent of Rs. 1,60,000 per College to the Under-graduate Colleges of Indian Systems of Medicine and Homoeopathy run by Voluntary Organisations and taken over by the State Governments for the purchase of Laboratory equipment and setting up of book banks to improve the standard of under-graduate education in ISM & H Colleges and bring more and more such colleges up to the desired standard. A sum of Rs. 1,00,000 is for the purchase of Laboratory equipment for Pathology and Physiology Departments and Rs. 60,000 is for the purchase of reference books for the use of students belonging to Scheduled Castes/Scheduled Tribes and weaker sections of society. 89 colleges of ISM & H have already been covered during the 5th, 6th and 7th Five Year Plans. During 1990-91 three colleges including two Ayurvedic and one Unani Colleges have received grants-in-aid of

Rs. 4.56 lakh for purchase of equipment and setting up of book banks. The remaining six Homoeopathy Colleges have received Rs. 7.80 lakhs each only as grants-in-aid for setting up book banks. For the VIII Five Year Plan, this Scheme has again been recommended and circulated to all State Governments.

## **7.14 Development of Medicinal Plants**

7.14.1 (i) In view of the rapid increase in demand of drugs of ISM & Homoeopathy, the Ministry of Health have taken steps for the development of such Medicinal Plants on which the quality and genuineness of the drugs mainly depend. The main thrust is toward gathering authentic data about the availability and requirement of the crude drugs for the Drug Industry of ISM & H and creating an awareness amongst the State governments and other agencies with regards to the importance of this natural resource and the need for its conservation. State level workshops for this purpose were continued and more workshops on Medicinal Plants were organised in Andhra Pradesh and West Bengal during the year.

7.14.1 (ii) A National Workshop on Medicinal Plants was also organised in New Delhi on 9th August, 1990. The objective of the workshop was to discuss the inter-related aspects pertaining to the development of Medicinal Plants in coordination with the concerned agencies/departments. The Workshop specifically recommended immediate steps like cultivation and research for development of Medicinal Plants which are in greater demand for preparation of drugs of ISM & Homoeopathy. The Workshop identified 45 such plants.

7.14.1 (iii) The Ministry has also formulated a scheme for providing financial assistance to the Organisations under Central/State/UTs Governments, Autonomous Bodies and Statutory Organisations etc. for development and cultivation of Medicinal Plants during the 8th Plan.



The Scheme will also augment the efforts of cultivation of the identified medicinal plants which are in greater demand but short in supply. The pattern of the scheme is being finalised.

#### **7.15 Indian Medicines Pharmaceutical Corporation Ltd., Mohan (IMPCL)**

7.15.1 (i) The Company is a Government of India Undertaking, under the administrative control of the Ministry of Health & F.W., having its registered office and factory at Mohan, Distt. Almora in the Kumaon Hills. The Company was incorporated in July, 1978 and production was started in 1983. The authorised share capital and paid-up share capital are Rs. 100 lakh and Rs. 50 lakh respectively.

7.15.1 (ii) The supply of Ayurvedic and Unani medicines is being made to C.G.H.S. and C.C.R.A.S. Units and certain State Govts. etc. In a small way sale in an open market has also been made by the Company.

7.15.1 (iii) In view of the progressive trend in turnover, the Company earned profit continuously for the previous 3 years. In 1989-90 the target was fixed as Rs. 1 crore and the turnover has been increased to Rs. 1.07 crore (pre-audited data) from turnover of Rs. 1.02 crore in 1988-89. In the previous year the profit

before tax was Rs. 28.33 lakh and this profit is also expected during the year under report. During the current year up to Oct., 90 the production and sales is Rs. 25.49 lakh and Rs. 52.24 lakh respectively and the sales are expected to be above Rs. 1 crore in the current year. Rs. 5 lakh the budget provision for 1989-90 was received by the Company towards equity contribution.

7.15.1 (iv) A provision of Rs. 10 lakh has been made in the budget provision for 1990-91 for investment in the Company as equity contribution.

#### **7.16 Election to the Central Council of Homoeopathy**

7.16.1 (i) Out of 19 States where elections to the Central Council of Homoeopathy were to be conducted, elections in 18 States have been completed and for the remaining one State, the matter is under process. Similarly, out of 25 Universities, elections in 15 Universities have been completed and for the remaining 10 Universities, the matter is under process. Nominations to the Council on the basis of the elected candidates have been done as per prescribed procedure.

7.16.1 (ii) The names of elected/nominated candidates have since been notified in the Gazette.



## FACILITIES FOR SCHEDULED CASTES AND SCHEDULED TRIBES



**I**n consonance with the provisions of Articles 46 of the Constitution which require the State to promote with special care the interests of the weaker sections of society, especially the Scheduled Castes and Scheduled Tribes, the Ministry continued to strictly follow the broad strategy evolved for the development, welfare and well-being of these sections.

8.1.2 The entire area including the localities in which SC/STs live is covered by the Health & Family Welfare Schemes/ Programmes. However, there are some locational and qualitative imbalances in the services provided to STs & SCs.

8.1.3 In order to remove the imbalances and provide better health care and Family Welfare services to STs/SCs, the population coverage norms have been relaxed.

### 8.2 Approach & Strategy

8.2.1. The strategy for meeting the health care and family welfare needs of STs and SCs envisages the location of health and family welfare units in Tribal habitats and in the case of Scheduled Castes in or around areas adjacent to Scheduled Caste Basties/Villages having 20% or more Scheduled Caste population.

8.2.2 Accordingly efforts are sustained for the provision of a network of Community Health Centres, Primary Health Centres, Sub-Centres, rural dispensaries supplemented by Village Health Guides and trained dais (Traditional birth attendants) supported by the implementation of programmes for the Control of Communicable Diseases, action oriented research and opening of more dispensaries, hospitals of Ayurvedic/Homoeopathic



Systems in or nearest to locations inhabited by SCs/STs. The mobile dispensaries and camps organised wherever feasible, are catering to their needs at their doorstep.

### 8.3 Progress

8.3.1 State Governments have been advised to sanction a PHC for 20,000 tribal population and one Sub-Centre for every 3000 tribal population as against the general rural norm of one PHC for 30,000 population and one Sub-Centre for 5000 population. The States have been advised to set up at least 15% of the Sub-Centres in Scheduled Caste Basties or village having 20% or more Scheduled Caste population and 7.5% of their annual targets in tribal areas.

8.3.2 They have also been advised to give further relaxation for setting up Sub-Centres/Primary Health Centres in the case of tribal hemlets and Scheduled Caste Basties which are 5 kms away from the available Health & Family Welfare delivery points.

8.3.3 While establishment of Primary Health Centres under the Minimum Needs Programme of the State Sector, 100% Central assistance is provided for establishment of Sub-Centres (except construction of building and salaries of male health workers) since 1.4.1981 as well as Sub-Centres established prior to 1.4.74 under the Family Welfare Programme.

8.3.4 So far, 17101 Sub-Centres, 3031 Primary Health Centres and 310 Community Health Centres have been established in Tribal areas, besides 1170 dispensaries. Similarly 10032 Sub-Centres, 1909 Primary health Centres and 83 Community Health Centres have been established in Scheduled Caste basties/villages having 20% or more Scheduled Caste population, besides 301 hospitals/dispensaries.

8.3.5 The Central Government is provid-

ing 100% assistance to States/UTs to train dais (Traditional birth attendants) to improve their skill and ensure safe and aseptic deliveries to reduce maternal and infant mortality rate in rural/tribal areas. A delivery kit is provided to them after completion of training. They are paid Rs. 3.25 per delivery to replenish the kit. The majority of the dais trained belong to SC/ST community.

8.3.6 A pilot project for intensification of dais training programmes was taken up with UNICEF assistance in 11 selected districts having maximum maternal/infant mortality rate. The Programme has been taken up in the districts of Bhilwara and Banswara in Rajasthan, Dhar and Chhindwara in Madhya Pradesh Sambalpur and Keonjhar in Orissa, Varanasi and Barabanki in U.P., Saran in Bihar and Tirunelveli and North Arcot in Tamil Nadu. Out of these, 7 districts are either fully or partly tribal districts.

8.3.7 A survey has been done in 1989 in project districts to (i) assess the utilisation of health facilities by the people (ii) evaluate the behaviour of community and health workers regarding care during pregnancy, child birth and the post natal period; and (iii) determine the cause of maternal and new born mortality. After the evaluation of this project, a decision will be taken to extend the project all over the country in a phased manner and within the available resources.

### 8.4 Research and other Programmes/Schemes

8.4.1 Central Institutes like Indian Council of Medical Research, National Institute of Health and Family Welfare, JIPMER, Pondichery, PGIMER Chandigarh and All India Institute of Hygiene and Public Health, Calcutta are engaged in studying the typical health problems of primitive tribes, other tribal groups and SCs. Funds are provided by the Central Government for conducting the research.



8.4.2 Recent parasite examinations among tribal populations by AIH&PH, Calcutta have identified a very uncommon parasite in India called "enhiostomiasis" which caused diarrhoea. This finding has been accepted for publication in the *Annals of Tropical Medicine and Parasitology*, United Kingdom. .

8.4.3 National Institute of Health and Family Welfare, New Delhi has submitted the reports of the study carried out on Genetic and Socio-cultural Determinants of Tribal Health of a primitive tribe Kutia Kondlis (Orissa) and Baster tribal groups of Madhya Pradesh.

8.4.4 JIPMER, Pondicherry have completed preliminary biological and genetic study of the primitive tribal 'Great Andamanese' of the A&N Islands. They have now taken up the study to identify the specific causes for the demographic decline, to eliminate the risk factors and to immunise the population against common infectious diseases.

8.4.5 The Centrally sponsored schemes of Malaria, Filariasis, TB Control and National Leprosy Eradication Programmes are providing services to all including SCs/STs with emphasis on tribal areas, SC Basties/Villages having 20% or more SC population. By the end of 1990-91 all the tribal and partly tribal districts will be covered by the Multi Drug Treatment to eradicate leprosy. Short course Chemotherapy Drug Regimen which reduces the period of treatment of T.B. patients is being extended to 2 tribal and 18 partly tribal districts. All the tribal and partly tribal districts have been covered under the Universal Immunisation Programme.

8.4.6 The Tribal Development Planning Cell set up in the Ministry continued to coordinate the formulation, implementation, monitoring etc. of the Tribal Sub-Plan and Special Component Plan besides offering guidance and advice to States/UTs etc.

## 8.5 Indian Systems of Medicine and Homoeopathy

8.5.1 Ayurvedic/Homoeopathic hospitals/dispensaries are being set up by States/UTs. At present 1020 Ayurvedic and 210 Homoeopathic dispensaries besides 43 Ayurvedic Hospitals are catering to the health needs of tribal populations.

8.5.2 Similarly 379 Ayurvedic, 313 Homoeopathic and 16 Unani dispensaries are functioning in Urban slums/SC Basties/Villages having 20% or more SC population.

8.5.3 The Central Council for Research in Ayurveda and Siddha has taken up 7 Tribal Health Care Research Projects in Ayurveda and 2 Tribal Health Care Research Projects in Siddha exclusively in tribal areas, besides, one Amchi Research Unit at Leh (Ladakh) in J&K. The aims and objectives of these projects are to study the living conditions of tribal people, folk medicines used by them, occurrence of medicinal plants in the area, propagation of knowledge on oral hygiene, prevention of diseases, uses of common medicinal plants available in the area and to extend medical aid to their doorstep. 40 tribal pockets consisting of a total population of 42000 individuals were covered and incidental medical aid provided to 25000 patients by these projects.

8.5.4 The Central Council for Research in Unani Medicine has taken up a programme in such rural and far flung areas which are predominantly inhabited by SC/ST population and where health care facilities are either rare or none at all. Since the possibilities of coming across cases of common as well as chronic diseases are high in such areas, the researchers of Council make door to door surveys in these areas mainly to register research cases of different ailments. The researchers also provide free medical treatment to the ailing people nearer to their doorstep and thus serve as a potential source of health care delivery to the



masses. Presently 14 institutes/units have such mobile wings. So far, 1.38 lakh and 8677 people belonging to SC/STs respectively have been covered under this programme.

8.5.5 The Central Council for Research in Homoeopathy is providing medicines, incidental curative services and also continuing surveys taken up in order to study the clinical problems relating to diseases most prominent among tribal populations through its 22 Clinical Research Units set up in tribal/rural areas to cater to the needs of SCs/STs. During 1989-90 up to Jan'90 the units under the CCRH covered 77302 population in door to door surveys and treated 173332 patients in the OPDs of their units.

8.5.6 The National Institute of Ayurveda, Jaipur organises mobile camps in the tribal areas, SC basties or villages of Rajasthan to provide OPD treatment to the people living therein. During 1989-90, the Institute organised 4 camps in Banswara and Dungarpur and provided medical aid to the tribals/SCs living in these districts.

## 8.6 Financial Implications

8.6.1 An outlay of Rs. 18.73 crore for the Special Component Plan for SC and Rs.20.61 crore for the Tribal Sub-Plan has been provided during 1990-91 under the Central Health Sector for implementation of Central and Centrally Sponsored Schemes.

## 8.7 Special Cell at the Headquarters

8.7.1 The Scheduled Castes/Scheduled Tribes Cell in the Ministry continued to look after the service-interests of the Scheduled Caste/Scheduled Tribe employees during 1990. This Cell assists the Liaison Officer in the Ministry in discharge of his duties in respect of matters relating to representation of Scheduled Castes/Scheduled Tribes in services in establishments under this Ministry. It circulated various instructions/orders re-

ceived from the Department of Personnel and Training to the peripheral units of the Ministry for their guidance and necessary compliance. It also collected various types of statistical data on the representation of Scheduled Castes/Scheduled Tribes from the subordinate offices of this Ministry as required by the Department of Personnel and Training and the Commissioner for Scheduled Castes and Scheduled Tribes. The Cell scrutinises cases where approval for de-reservation of posts are moved. Advice is also rendered regarding reservation procedures and maintenance of rosters, to various sections and offices of the Ministry. Complaints/representations from various Associations and individuals regarding non-observation of the reservation policy and discrimination practised on grounds of social origin are dealt with in this Cell, thus keeping a close watch to ensure justice and equity to the Scheduled Caste and Scheduled Tribe employees.

8.7.2 During 1990, inspection of rosters was carried out in respect of a local subordinate office under control of the Ministry. The defects and procedural lapses thereof were brought to the notice of the officials. The salient aspects of the scheme of reservation were brought home. The practical difficulties in implementation of reservation orders and maintenance of rosters were clarified. Suggestions were made to streamline the maintenance of rosters in that Institute.

8.7.3 A Special Recruitment Drive for Scheduled Castes/Scheduled Tribes was launched by the government during this year to remove the backlog in vacancies reserved for Scheduled Castes/Scheduled Tribes. The backlog vacancies were identified and initial recruitment action taken in respect of the subordinate offices and autonomous organisations of this Ministry. This Cell coordinated the recruitment efforts of the subordinate formations, and progress of recruitment was intimated to the Department of Personnel and Training at regular intervals. Despite concerted



efforts, suitable candidates belonging to Scheduled Caste & Scheduled Tribe categories are not available for recruitment against some special categories of posts. Sincere efforts are, however, continuing to liquidate the backlog of reservations.

8.7.4 The total number of employees and representation of Scheduled Castes and Scheduled Tribes in (i) Central Health Service Cadre (the cadre controlled by the Ministry) and (ii) the Public Sector undertaking under control of the Ministry is as under:

**Representation of Scheduled Castes and Scheduled Tribes  
among others as on 1.1.90**

<i>Employer</i>	<i>Total Employees</i>	<i>Scheduled Castes</i>	<i>Scheduled Tribes</i>
(i) Central Health Services:—	3,744	551	217
(ii) Public Sector undertaking (Hindustan Latex Limited, Indian Medicine Pharmaceutical Corp. Ltd., Hospital Services Consulting Coprn. Ltd.).	1,855	459	95



## USE OF HINDI IN OFFICIAL WORK



**T**he use of Hindi in official work in the Ministry is being looked after by two Hindi Sections and one Official Language Cell. The Hindi Sections are mainly concerned with the translation work of both the Departments, viz. Health and Family Welfare, whereas the OLI Cell deals with the Official Language Policy of the Union Government in the Ministry and its attached and subordinate offices, autonomous bodies, statutory organisations and public sector undertakings, etc.

9.1.2 The Division works under the supervision of a Joint Secretary and comprises Director (OL), two Asstt. Directors (OL), and ten translators along with other ministerial staff. In order to promote the use of Hindi in official work, posts of Hindi officers and Hindi translators have been sanctioned/filled up in 47 major institutions/organisations etc. under the

Ministry including the Directorate General of Health Services, an attached office under the Ministry.

### 9.2 Hindi Teaching Scheme

9.2.1 There are 907 officers/employees in the Ministry. Out of them, 873 have working knowledge/proficiency in Hindi. Similarly, out of 155 typists and 111 stenographers, 23 typists and 22 stenographers have been trained in Hindi typing and stenography respectively. At present, 13 employees are undergoing training in Hindi.

### 9.3 Implementation of Official Language Act/Rules and Annual Programme

9.3.1 *Correspondence:* Continuous efforts are on to achieve the targets fixed by the Department of Official Language in the



Annual Programme for 1990-91 for correspondence in Hindi.

9.3.2 Letters received in Hindi are being replied to in Hindi.

9.3.3 Entries in the service books of group 'C' and 'D' employees are being made in Hindi.

9.3.4 All administrative and other reports are being prepared bilingually, i.e. in Hindi and English.

9.3.5 Implementation of the Programme is being regularly monitored/reviewed in the meetings of the Official Language Implementation Committee and Hindi Salahkar Samiti of the Ministry. Suggestions given by the members are implemented accordingly.

#### **9.4 Notifying Names of Offices Under Rule 10(4) of the Official Language Rules, 1976.**

9.4.1 The Ministry of Health and Family Welfare has been notified under Rule 10(4) of Official Language Rules, 1976 on 24.11.1978. During the year under report, the total number of notified offices under the Ministry has now gone up to 67.

#### **9.5 Inspection of the Subordinate Offices**

9.5.1 During the year under report, the inspection team of the Ministry inspected 15 subordinate offices bringing their shortcomings to their notice for remedial action.

#### **9.6 Incentive Scheme**

9.6.1 The scheme of giving cash awards to the employees as an incentive for the use of Hindi in noting and drafting in official work was in operation during the year as in the past.

#### **9.7 Hindi Week**

9.7.1 Hindi Week was organised in the

Ministry from 17.9.90 to 21.9.90. During the Week, various competitions, viz. noting, drafting, essay, elocution, typing and shorthand competitions, were organised. Cash prizes were earmarked for the officers/employees declared winners in these competitions.

#### **9.8 Promoting Writing of Books on Public Health and Medicine in Hindi.**

9.8.1 In order to encourage the authors of original books in Hindi and translation from Regional Languages into Hindi on various subjects relating to Public Health and Medicine, the Ministry of Health and Family Welfare is running a scheme of awards to such authors. Five best books in Hindi and five books translated from other languages into Hindi are considered every year for cash awards of Rs. 10,000/- each. For the year 1988, 'Asthi Rog Vigyan' by Dr. R.C. Gupta was adjudged as the best entry. Various suggestions are being considered to make the Scheme more attractive and for giving it wider publicity.

#### **9.9 Mechanical Aids**

9.9.1 Efforts were continued for the procurement of Devanagari Typewriters in the Ministry and in its subordinate offices. At present there are 61 Devanagari typewriters in the Ministry of Health and Family Welfare.

9.9.2 Besides, there are 8 bilingual electronic typewriters, 2 word processors and 2 electric typewriters in Hindi in the Ministry.

#### **9.10 Use of Hindi in Recruitment Examinations and Training Institutions**

9.10.1 Instructions have been issued to take action for the use of Hindi as an alternative medium in recruitment examinations of subordinate offices and to make arrangements for the Hindi medium in the training institutions of all the Subordinate Offices/Autonomous Bodies etc. under the Ministry.



9.10.2 Various para-medical courses such as Nursing etc. and also training programmes for different categories of employees of hospitals/institutions are also being imparted in Hindi/regional languages.

### **9.11 Official Language Implementation Committee**

9.11.1 During the year, the Official Language Implementation Committee of the Ministry met twice under the chairmanship of the Joint Secretary. In these meetings, the position regarding progressive use of Hindi in the Ministry was reviewed. Suggestions given by the members of the Committee have been implemented/are being implemented.

### **9.12 Visit of Committee of Parliament on Official Language**

9.12.1 The Committee of Parliament on Official Language visited this Ministry on 11.7.90 and gave valuable suggestions regarding use of Hindi in the Ministry. Action has been taken/is being taken to fulfil the assurances given to the Committee.

9.12.2 The Committee of Parliament on Official Language also visited the Regional Office for Health and Family Welfare, Ahmedabad, a subordinate office under the Directorate General of Health Services on 10.7.90.

### **9.13 Hindi Salahkar Samiti**

9.13.1 A Hindi Salahkar Samiti is functioning in the Ministry of Health and Family Welfare under the chairmanship of Union Minister of Health and Family Welfare. The Committee met twice during 1989-90. The last meeting of the Committee was held on 30.7.90.

9.13.2 On the recommendations of the Samiti to increase the use of Hindi in the field of Health and Family Welfare, seminars/workshops have been proposed to be

organised in Hindi medium by the leading institutions under the Ministry. Such workshops/seminars were also organised last year. The All India Institute of Medical Sciences, New Delhi, National Malaria Eradication Programme/Indian Council of Medical Research, New Delhi and National Institute of Health and Family Welfare, New Delhi have organised such workshops/seminars during the current year.

9.13.3 The non-official members of the Hindi Salahkar Samiti who are locally available, are being invited to attend the meetings of the Official Language Implementation Committee of the various offices located in different parts of the country.

### **9.14 Other Activities**

9.14.1 Action is being taken for publication of Hindi version of two reference books, viz. Indian Pharmacopoeia and National Formulary of India which were got translated from the Commission for Scientific and Technical Terminology, New Delhi.

9.14.2 The Minister of State for Health and Family Welfare distributed the cash prizes to the employees of the Ministry on 30.7.90, who participated in various incentive schemes for promoting the use of Hindi.

9.14.3 Director (OL) was actively associated with Medical and Para-medical Education Medium Committee and he undertook extensive tours to various medical colleges/institutions located in Hindi-speaking States.

9.14.4 The use of Hindi is progressively increasing in the journals/magazines being brought out by the major institutions/councils/hospitals etc. under the Ministry. The main subjects/summaries of research articles are also being included in Hindi.



9.14.5 Help literature was provided to the employees/officers of the Ministry for promoting use of Hindi. These include Administrative Glossary, Karyalaya Sahayika and other literature.

9.14.6 Hindi Day/Hindi Week was organised in various offices under the Ministry during the year.

9.14.7 Director (OL) acted as a member of the evaluation committee relating to selection of books under the incentive scheme for writing books in Hindi on Public Health and Medicine. He also assisted in the selection of incumbents for Hindi

posts in the various offices located in Delhi.

9.14.8 The Services of Hindi stenographers in the Hindi pool were extended to officers of the Ministry from time to time.

9.14.9 A Hindi translator of the Ministry was deputed for translation training for three months to Central Translation Bureau, New Delhi. w.e.f. 1.10.90.

9.14.10 To encourage the use of Hindi in official work, an appeal was issued on behalf of the Union Minister of State for Health and Family Welfare in the Ministry and its offices.



## INTERNATIONAL COOPERATION FOR HEALTH AND FAMILY WELFARE



**V**arious international organisations and the United Nations agencies continue to provide significant technical and material assistance for numerous health and family welfare programmes in this country. The status of this international cooperation with various agencies is discussed in this chapter.

### 10.2 World Health Organisation

10.2.1 The World Health Organisation (WHO) is the main UN Agency collaborating with this country in promoting and developing health care facilities. As a founder member, India makes regular annual contributions to WHO. Besides, India makes voluntary contributions to the following programmes of WHO:

- (a) WHO/UNDP/World Bank Special Programme for Re-

search and Training in Tropical Diseases (TDR);

- (b) WHO Special Programme for Research Development and Research Training in Human Reproduction (HRP).

10.2.2 Voluntary contributions amounting to US \$ 25,000 and \$ 35,000 respectively for these programmes for 1990 are being released. In addition, ICMR will also make a contribution of Rs. 1.5 lakh to the WHO HRP Programme for 1990.

10.2.3 The WHO provides assistance to member States on a biennium basis through the following services:

- (i) Supplies and Equipment



(ii) Training/Fellowships/Study  
Tours

(iii) Short-term Consultants

(iv) Subsidy for Group Educational  
Activities (Seminars/Workshops/  
Meetings/Conferences/Studies/  
etc).

10.2.4 During th biennium 1988-89, the assistance from WHO was \$ 12,092,600. As many as 48 projects are assisted. The assistance from WHO is mainly used as seed money to generate health development activities and fill some vital gaps in the National Health Programme.

10.2.5 During the biennium 1990-91, WHO is to provide US \$ 13,810,100 from its regular budgetary resources (Country Budget) and 55 projects are being assisted.

### 10.3 UNICEF

10.3.1 UNICEF assistance has been received for the following programmes in the health sector during 1990:-

1. Malaria
2. STD/AIDS
3. Essential Drugs
4. School Health
5. Kala-Azar

10.3.2 Out of the original commitment of \$ 942,000, \$ 343,422 has been utilised so far. it is anticipated that \$ 495,443 will also be utilised by the year.

10.3.3 For the supplementary resources there was a commitment for \$ 3240,000, for leprosy, out of which \$ 89,000 has been spent. These funds can be utilised in subsequent financial years as well.

10.3.4 *UNICEF MPO 1991-1995*: UNICEF has allocated US \$ 35000 from the general

resources for 1991-1995 and also supplementary resources of US \$ 11,000.

The General Resources are for the following programmes :—

Malaria  
Kala Azar  
STD/AIDS  
T.B.  
Guineaworm, Eradication  
Yaws

10.3.5 Supplementary resources are meant for leprosy control.

### 10.4 USAID

10.4.1 An agreement was signed with USAID in July, 1985 for Biomedical Research Support Project. Under the agreement USAID was to provide US \$ 9.3 million as grant and \$ 3.3 million as loan (total \$ 13.1 million) for the project. This project was initially having four components viz. Field Epidemiology, Laboratory Support, Clinical Epidemiology and Quality Control of Biologicals. The initial allocation for each of these components was as follows :—

	(in US \$ millions)		
	Grant	Loan	Total
Field Epidemiology	4.060	.332	4.392
Laboratory Support	2.920	2.518	5.438
Clinical Epidemiology	1.945	—	1.945
Quality Control of Biologicals	0.375	.950	1.325
	9.300	3.800	13.100

10.4.2 As the loan component has since been deobligated, the Field Epidemiology, Laboratory Support and Quality Control of Biologicals could not take off for quite some time. A new and separate agreement has been signed for the Quality Control of Bilologicals. For the Field Epidemiology and Laboratory Support a revised im-



plementation plan was signed in July, 1990. Under this component, USAID will now be providing a grant of \$ 2.642 million. The project assistance completion date however remains unchanged i.e. 31st March 1992.

10.4.3 For the Clinical Epidemiology there has been fairly good progress as out of the total provision of \$ 1.945 million, we have so far utilised \$ 1.375 million.

## 10.5 Quality Control of Health Technologies.

10.5.1 As per Grant Agreement for the project signed with USAID on 24.9.90, the total cost of the project is \$ 87,700,000, of which USAID is to provide \$ 13,300,000 and the Overseas Economic Cooperation Fund of the Government of Japan is to contribute \$ 50,500,000. The rest of the amount viz. \$ 23,900,000 is to be contributed by the Government of India. The Project is to be completed by 30th September, 1998.

10.5.2 Major inputs of the Govt. of India for the Project will be:-

Land for the NIB;

Construction management of the NIB buildings;

Personnel for NIB;

Operations and maintenance of the NIB; and

Overseas Economic Cooperation Fund (OECF) loan interest repayment.

10.5.1.(i) USAID will be responsible primarily for arranging technical assistance and training and procurement of the required scientific equipment. The Overseas Economic Cooperation Fund of Japan will be the major financial contributor to this project covering all costs of construction and fixed equipments.

10.5.2 The major activities of the project are the development of the National Institute of Biologicals (NIB) as a functioning national quality control institution for Biological Projects in India. This will involve construction of the building, recruitment and training of appropriate staff and development of systems of operation that meet the needs of quality control. This will help the Govt. of India in achieving reduced child morbidity and mortality and general improvement of health for all through safer and more effective biological products. At the end of the project the NIB will be performing the following functions:—

- Provision of reliable information, verifiable test data and expert assistance to the DCI and the Drug Controller of the States (DCSs).
- Establishment of national quality control procedures.
- Establishment of Reference Standard.
- Monitoring of manufacturing and quality control procedures.
- Training and technical support to the manufacturers and other testing laboratories.
- Validation of other national and State testing laboratories.
- Creation and maintenance of a data base and management information system for biological products.
- Establishment of linkages with national and international institutes and manufacturers.

10.5.3 The project also provides for joint evaluation of the project by Government of India, USAID and Japanese authorities.

## 10.6 ODA Assistance

10.6.1 The Overseas Development Ad-



ministration (ODA), Britain, is giving assistance to the Ministry of Health and Family Welfare for the following projects:-

10.6.2 *Viral Hepatitis Research*: The estimated cost is £ 438,500. The duration is 3 years. It is an ongoing project. The assistance will be through equipments, consultancy training and visits to the U.K.

10.6.2 (i) *Medical Education Technology*:- The estimated cost is £ 500,000. It is an ongoing project. The assistance will be for equipments, consultancy and training.

10.6.3 *Human papillomavirus Infection and Cervical Cancer*: The estimated cost of the project is £ 263,210 . The assistance will be for consultancy and training. The project duration is 3 years. It is an ongoing project.

10.6.4 *Haemoglobinopathy Control*: The estimated cost is £ 570,820. The assistance is required for equipment, consultancy, visits to the U.K. and trainings. The project duration is 3 years and it envisages establishment of a course centre with facilities for pre-natal diagnosis screening and treatment of inherited haemoglobinopathy.

10.6.5 *T.B. Research*: The estimated cost is £ 524,837. The project duration is 3 years. It aims to investigate patient differences against T.B. through a study of the failure of BCG immunisation. The assistance is for equipment, consultancy, visits to the U.K. and training.

10.6.6 Under the National Blindness Prevention Programme, there is a proposal for establishment of a chlamydia laboratory for international research to promote, facilitate and support research for identification, control and prevention of chlamydial infections in India. The estimated cost is \$ 350,000. The project duration is 3 years.

10.6.7 *The Andhra Pradesh School Health*

*Programme*: This was recommended to the Department of Economic Affairs. Its objective is to improve the health of School Children in A.P. by reorganising and strengthening the existing school health services. The project involves training of teachers, doctors and mothers, import of equipment and machinery, visit of U.K. consultants. The project will cost about \$ 8 million.

10.6.8 The rotavirus research for zoonotic transmission will be conducted at NICED, Calcutta. The project intends to investigate the role of animals in the transmission of rotavirus among humans through field studies in North India. The estimated cost is around \$ 106,560.

10.6.9 *Technical Cooperation Programme for assistance to GCRI, Ahmedabad*: The assistance received will be by way of equipment and training. The estimated non-recurring expenditure is Rs. 3.3 billion. It was decided that the project will initially be for 3 years from 1989 to 1992 and the same can be extended to 1995. Phase I envisaged equipment worth Rs. 330 lakh which has already been procured and phase-II is awaiting approval of ODA. Phase III is on consultancy visits from the U.K.

## 10.7 SAARC

10.7.1 Ministry of Health and Family Welfare took part in the following events in 1990 under the South Asia Association for Regional Cooperation (SAARC) programme:-

1. Shri R.K. Ahooja, Joint Secretary, Ministry of Health and Family Welfare was deputed to attend the 8th meeting of the SAARC Technical Committee on Health & Population Activities held at Colombo for July 16-18, 1990.
2. India organised a SAARC workshop-cum-study tour on Artificial Limbs at All India Institute of Physical Medicine & Rehabilitation, Bombay from Sep-



tember 3-11, 1990. The meeting was attended by representatives from Bhutan, Maldives, Nepal, Pakistan, Srilanka besides India.

3. India organised a SAARC Seminar on Child Survival and Development at Institute of Child Health and Hospital for Children, Madras from October, 3-5, 1990. The meeting was attended by representatives from Bangladesh, Nepal, Bhutan, Pakistan, Srilanka besides India.

#### 10.8 Loan Agreement signed with OPEC/ Saudi Assistance

10.8.1 *Rewa Project*: An agreement was signed with OPEC Fund for International Development in February, 1989 for providing a loan of 10 million dollars by OPEC Fund for Rewa Hospitals Project, M.P. The Project aims at providing the health services infrastructure for the training of medical, paramedical and nursing students and to cater to health care delivery in Rewa District as well as neighbouring districts. The repayment of the loan is to start from April, 1994 and continue up to October, 2005.

10.8.2 *Gwalior Project*: Saudi Fund Development is to provide a loan of 16 m. dollars (6 crore Saudi Riyals) for Gwalior Hospital Project. A team was, sent to Riyadh in March 1989 to negotiate the draft agreement. This Ministry was represented by Smt. Sunita Mukherjee the then Deputy Director Adms. AIIMS, New Delhi. This Ministry is, however, not aware as to whether the agreement has since been signed by DEA with Saudi Fund. The project is expected to be completed by the end of December, 1993.

10.8.3 *Raichur District Hospital Project*: OPEC has agreed to provide a loan for 9 m dollars for the Raichur District Project, Karnataka. The recovery of the loan is to start from October, 1995 and continue till April, 2007. The project is for upgrading and expansion of the Raichur District

Hospital, Karnataka by way of construction of building etc.

10.8.4 *Basti Project*: OPEC has agreed to provide a loan of 6.5 m dollars to partially finance the Basti District Hospital Project, U.P. for a 500—bed hospital. The estimated project cost is Rs. 265.83 m which includes the foreign exchange component of 5.5 m for import of equipment, Rs. 41.3 m as recurring expenditure on salaries and contingencies etc. and also Rs. 5 m for renovation of the existing hospital at Basti.

#### 10.9 Japanese Assistance

10.9.1 *Cancer Control*: The Japanese Government has been supplying CT Scanners since 1984. We have already received 11 CT Scanners worth 1882.6 million Yen for the following Institutions :—

1. Cancer Institute, Madras.
2. All India Institute of Medical Sciences, New Delhi.
3. Postgraduate Institute of Medical Education and Research, Chandigarh.
4. K.G. Medical College, Lucknow.
5. S.M.H.S. Hospital, Srinagar.
6. S.M.H.S. Medical College and Hospital, Jaipur.
7. Cancer Hospital and Reserach Institute, Gwalior.
8. Kamala Nehru Memorial Hospital, Allahabad.
9. MNJ Cancer Hospital & Radium Institute, Hyderabad.
10. Medical College and Hospital, Rohtak.
11. RCC, Trivandrum.

10.9.2 The Madras Cancer Institute had in addition received the following equipment :—

1. Gamma Camera
2. Radio Isotope Callibrator
3. Whole Body Phantoms
4. Low Background Whole Body Counter



## 5. MMR Spectrometer

### 10.9.3 Other Projects:

10.9.3 (i) *Development of Medical College in Kerala*: The following 3 proposals have been sent for Japanese Assistance:

- a) Facilities for Advancing Cardiac and Cardiothoracic Investigations and Patient Care Facilities, at Medical College, Trivandrum.
- b) Primary Health Care Scheme for Medical College, Trichur.
- c) Project for Kidney Transplantation Unit, Medical College, Calicut.

10.9.3 (ii) All the three projects involve import of equipment.

10.9.3 (iii) The proposal was forwarded to the Department of Economic Affairs in July, 1990.

10.9.4 *Tamilnadu Arasu Medical Science and Research Institute (Tamarai)*: The Rs. 80 crore project proposes to create a centre of excellence for providing medical care, educational and research facilities of a light order for health science. Rs. 35 crore of the project relates to foreign assistance for supply of equipment and related training. This proposal is being sent to the Department of Economic Affairs for Japanese assistance.

10.9.5 *Medical College, Rohtak*: The proposal envisages upgradation of Medical College, Rohtak, to the level of Post graduate Institute. The foreign assistance component of the project is Rs. 23.82 crore and this is intended for import of equipment. The project has been sent for assistance to the Japanese authorities by the Department of Economic Affairs.

10.9.6 *Development of Secondary Level Hospital in Andhra Pradesh*: The Project seeks to develop the district and sub-district hospitals, so as to make medical care facilities available to people nearer home. The project is to cover about 200 locations spread all over the State and seeks to add about 12287 hospital beds at the district and sub-district level. The

project envisages a total capital investment of Rs. 127.23 crore spread over a period of 4 years by way of building etc. The recurring cost during the project period has been estimated at Rs. 25.75 crore. The proposal is being sent to DEA.

10.9.7 *Assistance for Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow*: The Institute has received assistance through grants-in-aid to the tune of 1973 m Yen in 1986-87 and 1346 m Yen in 1987-88. The assistance has been given in the form of equipment. Another grant to the tune of Rs. 15 crore is also expected in the 2nd Phase.

10.9.7 (i) The Assistance to the Institute has been mainly in the form of equipment and training to the faculty members of the Institute.

### 10.10 Swedish International Development Agency (SIDA)

10.10.1 *National T.B. Control Programme*: Swedish International Development Agency (SIDA) has been assisting National Tuberculosis Control Programme since the year 1979 with material and equipments, primarily for diagnosis of TB patients. It is also assisting the pilot study in short course chemo-therapy drug regimens by supplying anti-TB drugs like Rifampicin and Pyrazinamide.

10.10.2 After the expiry of 2nd agreement in June 1989, SIDA extended their agreement to support the National Tuberculosis Control Programme for a further period of one year i.e. upto the end of June, 1990. The next agreement is being finalised between Govt. of India and SIDA Authorities.

10.10.3 The following anti-TB drugs, material and equipments have been agreed to by SIDA for supply during the year 1990-91:

- |                              |    |
|------------------------------|----|
| 1. X-ray unit with           |    |
| Odelca Camera                | 1  |
| 2. Mahindra & Mahindra Jeeps | 25 |



3. Rifampicin Capsules	1 million
4. Pyrazinamide tablets	1 million
5. X-ray film rolls	20,000 Rolls

#### 10.10.4 *National Leprosy Eradication Programme (NLEP)*: Swedish

International Development Agency (SIDA) has been assisting NLEP since 1978 by providing financial assistance for additional inputs such as vehicles, drug, equipment, additional POL, health education and cash incentives to the workers etc. for extension of multi drug treatment to leprosy cases in the endemic districts. The agreement was for funding 18 such districts. The agreement was extended upto June, 1990.

10.10.5 Under the agreement SIDA's committment was to provide financial assistance to the tune of \$ 3992648 out of which actual expenditure of \$ 3191981 has been incurred on the MDT districts by SIDA.

10.10.6 It is now proposed to sign new three years agreement with SIDA for funding of the MDT districts. The agreement, among others, provides for funding of 5 districts which were initially in the MDT programme with SIDA support. These districts will continue to receive SIDA assistance till they reach maintenance phase. SIDA will also fund new 10 MDT districts. The contribution of SIDA will be to the tune of SEK 32,000,000.

#### 10.11 **Danish International Development Agency (DANIDA)**

10.11.1 *National Leprosy Eradication Programme (NLEP)*: Government of Denmark and India signed an agreement in January, 1986 to provide DANIDA assistance to National Leprosy Eradication Programme. The first phase of the agreement was for 5 years i.e. from January 1986 to December, 1990. During the first phase, 4 districts namely Salem in Tamil Nadu, Cuttack in Orissa and Durg and Rajnandgaon in Madhya Pradesh were taken-up. As a result of 1989 review, it has been decided to extend

the agreement for a period of 5 years i.e. from 1991-95 which would be called the Phase-II. In Phase-II, DANIDA will continue to provide assistance to the existing 4 districts and to 4 new districts namely Madras and North Arcot in Tamil Nadu, Sambalpur in Orissa and Gwalior in Madhya Pradesh. During the first phase, committment to the tune of DKK 760.6 million was made by DANIDA. Committment during the second phase will be to the tune of Rs. 186,034,000/-

10.11.2 *National Blindness Control Programme*: The agreement for IInd Phase Danish Assistance to National Programme for Control of Blindness has been signed in Oct. 1989. Financial Assistance to the tune of Rs. 22.24 crore has been agreed to for a period of five years from the date of the signing of the agreement. The services/activities to be covered during the phase II Danish assistance will be as follows:—

- (i) To provide Ophthalmic Equipments to all the remaining PHCs in the country.
- (ii) To provide additional Ophthalmic Equipments to 200 Distt. Hospitals.
- (iii) To establish a Maintenance and Repair of Ophthalmic Instruments Workshop at Dr. R.P. Centre in Delhi.
- (iv) Mobility.
- (v) Central Monitoring & Evaluation Cell in DGHS.
- (vi) State Monitoring & Evaluation Cells in State Directorates.
- (vii) Training School for Ophthalmic Assistance.
- (viii) To develop a pilot Project Comprising 5 Districts in the States in the country by putting intensified input.

10.11.3 During 1990-91 an amount of Rs 1.45 crores of SIDA assistance has been approved for the Programme.



## 10.12 NORAD

10.12.1 The Govt. of India has entered into the agreement with NORAD for a period from 1991-93-94. During this period they will be funding 3 districts namely, Nellore, Kurnool and Parkasam. The commitment of NORAD is to tune of 10 million NOK.

## 10.13 Port/Airport Health Organisations

10.13.1 Arrangements for Health Clearance and Quarantine administration at the eight major Ports and five International airports in the country are made by the Central Government under the Indian Port Health Rules, 1955 and Aircraft (PH) Rules, 1954 which are based on the International Health Regulations, 1969. The objective of these Port and Airport Health Organisations is to prevent International spread of communicable diseases, prevention of entry of yellow fever into the country through passengers coming from or transmitting through notified endemic countries. Arrangements also exist for health clearance of aircrafts at Amritsar Raja Sansi Airport, Hyderabad Airport, Trivandrum Airport and Dabolim Airport. Similar arrangements are also made as and when necessary at Lucknow, Varanasi, Gaya, Nagpur, Ahmedabad, Poona, Bangalore and Andaman and Nicobar Islands. Arrangements exist for health clearance of ships at various minor ports and special arrangements regarding health clearance of ships arriving at Haldia Port, Tuticorin Port and New Mangalore are also made with the help of State Government Staff.

10.13.2 Deratting Exoption Certificates are being issued by all the eight International Ports in India, viz. Bombaly, Calcutta, Cochin, Kandla, Madras, Mandapam Camp, Marmagoa and Visakhapatnam. Deratting work is now being carried out at Bombay, Calcutta, Madras and Cochin ports.

10.13.3 Health checks established in 1976

at Attari in respect of India Pakistan Rail and Road Traffic are continuing.

10.13.4 No vaccination certificate other than against yellow fever is required for entry into India.

## 10.14 Fellowships

10.14.1. The Ministry of Health and Family Welfare received foreign assistance in the form of fellowships from World Health Organisation, Commonwealth Scholarship Commission, London, Overseas Development Administration, British Council Division, U.K. and other countries involved in the Colombo Plan. In addition; Japan, Yugoslavia, Denmark, Thailand also offer fellowship/training opportunities to our medical and para-medical personnel in their countries. Such assistance plays an important role in meeting training needs of our health personnel under various public health and medical programmes and in exposing them to new technological developments taking place around the world. During the year 1990, this Ministry nominated 209 candidates for WHO Fellowships and 107 candidates for Colombo Plan Fellowships. Besides this, 17 candidates have been nominated by this Ministry this year for Commonwealth Senior Medical Fellowship in U.K. during the year 1991. 50 candidates have also be nominated by this Ministry this year for Commonwealth medical Fellowship in U.K. during 1991.

10.14.2. During the year, 181 foreigners from various countries visited India for training/degree courses in various health institutions in this country under WHO Fellowship Programme. Apart form this, clearence of this Ministry was given to 97 foreigners to visit this country under various health programmes.

10.14.3 Upto the end of October, 1989 this year, 140 medical personnel were permitted to participate in International Conferences/Seminars/Symposia etc. abroad. This offorded an opportunity to



Indian medical experts to acquaint themselves with the latest developments in the field of medicine and surgery in other countries of the world and to exchange views with their counterparts in other countries. In addition, 138 young doctors were granted No Objection Certificate to pursue higher studies in various medical fields in USA.

#### 10.15 Deputation/Delegations to International Health Conferences

1. A delegation consisting of Sh. R. Srinivasan, Secretary and Sh. R.K. Ahooja, Joint Secretary, Ministry of Health & Family Welfare attended the 85th Session of WHO Executive Board, Geneva from 15-24 January, 1990.
2. Sh. Balbir Singh, Joint Secretary and Mrs. Debi Mukherjee, ADG (PFA), Dte. GHS were deputed to attend the workshop on Aflatoxin in Food and Meeting of Codex Coordinating Committee for Asia at Thailand from 2-12 February 1990.
3. Sh. R. Srinivasan, Secretary was deputed to study the utilisation of WHO Resources in his capacity as Vice President of WHO Executive Board at Brazzaville (Congo), Harare (Zimbabwe) and Geneva from 24 February to 4 March 1990.
4. Dr. S.K. Mishra, Adviser (Ay. & S) and Dr. V.N. Pande, Director, CCRAS were deputed to attend the 1st International Ayurvedic Conference at Mauritius from 17-19 March 1990.
5. Sh. S.B. Goel, Director (ISM) and Dr. C.H.S. Sastry, Dy. Adviser (Ayurved) attended SAARC Seminar on Traditional Medicine held at Kathmandu (Nepal) from 28-29 April 1990.
6. Dr. (Mrs) Vinodini Reddy, Director, National Institute of Nutrition, Hyderabad participated in the 20th FAO Regional Conference for Asia and the Pacific held at Beijing from 23-27 April 1990.
7. A high level delegation led by Sh. Rasheed Masood, Minister of State for Health and Family Welfare attended the 43rd World Health Assembly held at Geneva from 7-18 May 1990. The other members of the delegation were Sh. R. Srinivasan, Secretary, Dr. A.K. Mukherjee, acting DGHS and Sh. R.K. Ahooja, Joint Secretary.
8. Sh. M.S. Dayal, Addl. Secretary, Dr. A.K. Mukherjee, DGHS and Dr. (Mrs) Usha Luthra, Addl DG, ICMR were deputed to attend study tour on Iodine Deficiency Disorder at China from 27 May 1990 for one week.
9. A delegation consisting of Dr. P.L. Verma, Director, Homoeopathy Laboratory and Dr. V.T. Augustine, Adviser (Homoeopathy) Ministry of Health and Family Welfare participated in the 45th Congress of the International Homoeopathic Medical League held at Barcelona (Rome) from 10-13 May 1990.
10. Shri R. Srinivasan, Secretary (Health) in his capacity as Chairman of WHO Executive Board in the utilisation of WHO Resources visited Mali / Brazzaville from 18-23 June 1990.
11. Sh. J.C. Jetli, Secretary (FW), Ministry of Health & Family Welfare participated in the third meeting on Safe Motherhood Initiative of Interested Parties held at Geneva from 18-19 June 1990 and also participated in the meeting of the special Programme of Research, Development and Research Training in Human Reproduction held at Geneva from 20-22 June 1990.
12. Sh. Rasheed Masood, Union Minister of Health and Family Welfare visited Jeddah, Saudi Arabia from 27 June-20 July 1990 to lead the Haj Pilgrimage.
13. Sh. M.S. Dayal, Addl. Secy. (Health) Ministry of Health and Family Welfare participated in the International Symposium on Health Care Cooperation in Asia Pacific Region held in Tokyo from 25-26 June 1990.
14. Shri. R.K. Ahooja, Joint Secretary Ministry of Health and Family Welfare attended the 8th Meeting of the SAARC Technical Committee on Health and Population Activities held at Colombo from 16-18 July 1990.
15. Dr. V.T. Augustine, Adv. (Homoeopathy) visited Mexico to attend second congress of the International Homoeopathic Medical Organisation from 15-18 August, 1990.
16. A delegation consisting of two groups which were led by Dr. G.K. Viswakarma, DGHS and Dr. T. Verghese, Director, NICD respectively were deputed to USA for a period of one and three weeks respectively in connection with a project agreed upon by the Government of India and USAID for developing Epidemiological Services with Laboratory support in order to sensitise policy maker and decision maker to the importance and details of the project.
17. Dr. C.H.S. Sastry, Deputy Adviser (Ay) Ministry of Health & Family Welfare and Dr. Narain Sharma, National Institute of Ayurveda, Jaipur were deputed to attend SAARC seminar on Traditional Medicine at Kathmandu, Nepal from 25-26 Dec 1990.



## PART - II

# DEPARTMENT OF FAMILY WELFARE

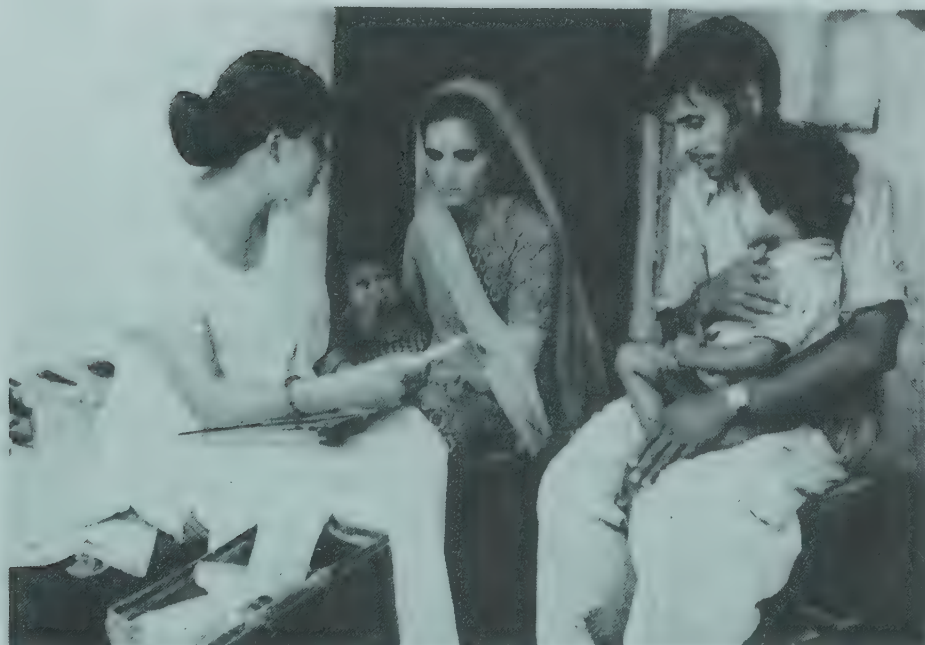








## NATIONAL FAMILY WELFARE PROGRAMME



**T**he demographic situation in India is a matter of grave concern and has serious implications for overall socio-economic development. Ever increasing numbers have over-shadowed the achievements that the nation has made on the economic front. Even though better health services have helped to bring down the death rate considerably, birth rate still continues to be very high. The need for a determined effort to achieve a considerable decline in the Birth Rate cannot, therefore, be over-emphasised.

11.1.2. India's population which was 342 million in 1947 has touched 844 million on 1st March, 1991 according to the preliminary Census-91 figures released recently. Though the Census count shows a marginal decline in our growth rate, but the problem remains a gigantic one. In 2.4% of land area, India is now

accommodating more than 16% of the world population. The population of the country is increasing by about 17 million every year.

11.1.3. People in India speak different languages, practice different religions and their cultural identities are also heterogeneous. Varying social customs and beliefs favour large family size and impede the process of change which would accelerate the adoption of modern methods of contraception. A universal desire to have at least one or two male children and low mean age of marriage of girls also account for large size of families. Moreover, there exist large scale variations and diversities in the demographic situation, socio-economic and cultural milieu between and within various States and regions of the country which make the programme of population



control a most challenging and formidable task.

11.1.4. A correlation between high infant mortality and the desire to have a large number of children is well accepted. The Infant Mortality Rate (IMR) per thousand live births on all India basis which was as high as 140 in 1975, has come down to 91 per thousand live births (1989 SRS estimates). But this is still quite high as compared to developed nations of the world. The IMR continues to have sharp variations from State to State and in different areas of the same State also.

11.2 Policy Framework

11.2.1 *National Health Policy*: India is committed to attaining the twin goals of "Health for All" and a 'Net Reproduction Rate of Unity' by the year 2000 A.D. through the universal provision of comprehensive primary health care services to all and an easy access to family planning and maternal and child health care facilities. The National Health Policy approved by the Parliament in 1983, enunciated the broad policy framework for attaining these goals and also defined the specific goals to be achieved under particular indicators of Health as well as family planning. Attainment of these goals would require securing of complete integration of all plans for health and human development with the overall national socio-economic development process.

11.2.2 *Goals To be Achieved*: The major long-term goals to be achieved for the country is to reach a replacement level of unity (NRR = 1) by the year 2000 A.D. The demographic goals as laid down in the National Health Policy for 2000 A.D. are as follows:—

- (a) Crude Birth Rate : 21 per thousand
- (b) Crude Death Rate : 9 per thousand

- (c) Infant Mortality Rate : Below 60 per thousand live births
- (d) Effective Couple Protection Rate : 60%
- (e) Life Expectancy at Brith : 64 years

The corresponding goals to be reached by 1990 are: birth rate of 29.1; death rate of 10.4; infant mortality rate of 90 per thousand live births and couple protection rate of 42%.

11.3 Programme Implementation

11.3.1 In keeping with the democratic traditions of the country, the Family Welfare Programme seeks to promote on a voluntary basis, responsible and planned parenthood with 'Two child norm' — male, female or both — through independent choice of family planning method best suited to the acceptors. Family planning services are offered through the total health care delivery system. People's participation is sought through all institutions, voluntary agencies, opinion leaders, people's representatives, government and influential functionaries and various other structures and influential groups. Imaginative use of the mass media and inter-personal communication is resorted to for explaining the various methods of contraception and removing socio-cultural barriers wherever they exist. As a result of this approach, the number of acceptors of various methods of family planning has started to register progressive increase over the years.

11.4 Performance Under The Programme

11.4.1 The Programme is estimated to have averted over 118 million births in the country so far. The annual Exponential Growth Rate (EGR) of population which rose from 1.25% in the 40's to 1.96% in the 50's and 2.20% in the 60's, reached a plateau during the 70's when



अखिल भारतीय शिशु मृत्यु दर+ (1971 से 1989)  
INFANT MORTALITY RATES+ ALL INDIA  
(1971 to 1989)



+ नमूना पंजीकरण पद्धति अनुमान + SRS ESTIMATES  
\* अनन्तिम \* PROVISIONAL







the growth rate was 2.22%. The preliminary Census Count 1991, has estimated a slight decline in the EGR during the 80s putting it at 2.11% for the decade 1981-91. Since the inception of the programme, in every Plan period, there have been varying levels of shortfalls in the family planning performance. In particular, the programme suffered a serious set back during 1977-82 and picked up only during the later period of the VI Plan. During the VI Plan period, achievements in Sterilisation, IUD, Conventional Contraceptives (CC) and Oral Pill users were 79%, 82%, 85% and 129% respectively. During the VII Plan, the total number of family planning acceptors has been consistently rising from year to year from a level of 18.92 million in 1985-86 to 26.04 million (prov.) in 1989-90 an all-time high record so far in any year since the inception of the programme. It is estimated that an overall couple protection rate of 43.3% (provisional) has been achieved as on March 31, 1990.

11.4.2. *Sample Verification:* Sample verification of family planning acceptors is carried out by the State D&E Cells, Regional Health Offices and Central Evaluation Teams in order to know the impact of the Family Welfare Programme in the country and to have a continuing check on the reliability of statistics. The findings of these sample checks are communicated to the States for further necessary action in the direction of improving upon the programme. A note on the findings of the sample verification of family welfare acceptors for the year 1988-89 is in the process of finalisation.

11.5 Family Planning Targets for 1990-91 and during the 8th Five Year Plan

11.5.1 The Family Planning targets for the year 1990-91 are given below:—

(Figures in millions)	
Sterilisation	5.80
I.U.D.	6.40

C.C. Users	15.08
O.P. Users	2.49

11.5.2 Working Group on Population Projections and Family Planning constituted by the Planning Commission in November, 1988 suggested the following targets for the 8th Five Year Plan (1990—95):—

(Figures in millions)	
Sterilisation	31.8
I.U.D.	35.0
C.C. Users	79.7
O.P. Users	12.7

11.6 Profile of Acceptors

11.6.1 *Age of Acceptors:* Available information on age of wives of acceptors and number of living children received on regular basis shows that the average age of wives of vasectomy acceptors declined from 32.7 in 1973-74 to 31.3 in 1988-89. The percentage of vasectomy acceptors below the age of 30 years has gone up from 33.4% in 1973-74 to 43.2% in 1988-89. In case of acceptors of tubectomy, the mean age declined from 31.8 years in 1974-75 to 29.9 in 1988-89. During the same period, the percentage of tubectomy acceptors below the age of 30 years increased from 37.4 to 53.9. In case of acceptors of IUD also, a decline in the mean age has been observed; the mean age declined from 29.8 years in 1974-75 to 29.0 years in 1988-89 in the country as a whole.

11.6.2 *Parity of acceptors:* The data available for the period 1978-79 to 1988-89 show only marginal change in the average number of living children. It was 3.4 during 1978-79 and 3.6 in 1988-89 in the case of acceptors of vasectomy. It declined from 3.7 to 3.3 in case of tubectomy acceptors and from 2.8 to 2.3 in case of IUD acceptors during the same period

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implying that couples with relatively lesser number of children are now coming for family planning acceptance. The percentage of acceptors with three or less number of children has gone up somewhat in case of tubectomy acceptors during the same period. It decreased from 61.2% to 55.7% in case of vasectomy; increased from 53.6% to 63.2% in case of tubectomy acceptors during this period. In case of IUD, the percentage of acceptors with two or less children increased from 47.5% in 1978-79 to 63.3% in 1988-89.

**11.6.3 Educational Status:** Available data on the educational status of wives of the acceptors for the year 1988-89 shows that percentage of illiterate acceptors was 37.4 in case of vasectomy, 43.9 in case of women who underwent tubectomy and 37.5 in case of IUD acceptors. Percentage of wives with matric or higher qualifications was 9.8 in case of vasectomy, 8.8 in case of women who underwent tubectomy and 11.1 in case of IUD acceptors.

## 11.7 Demographic Impact and Trends

**11.7.1** It is estimated that out of the 141.99 million eligible couples, 61.47 million couples constituting 43.3 per cent were effectively protected under various methods of family planning as on March 31, 1990. Since 1979-80, there has been an increase by about 21% points in the level of couple protection. The rate of step up in couple protection has accelerated during the last ten years. The average annual increase in CPR which was 1.2% points during 1970-80 rose to 2.1% points during 1980-90. Since inception of the programme, about 118 million births are estimated to have been averted. The annual number of births averted has gone up from 4.9 million in 1980-81 to 7.3 millions in 1984-85 and 11.7 million in 1989-90. The evidence of decline in the birth rate at national level is also available from the SRS estimates of the Registrar General of

India. Based on reverse survival method, a birth rate of 41.2 was estimated for the decade, 1961-71. The estimate of birth rate as per SRS for the year 1989 was 30.5 which is lower by 10.7 points from the level of 41.2 that stood during 1961-71.

## 11.8 Infrastructure

**11.8.1** Various studies conducted through private and other organisations have highlighted that the existing infrastructure is not being optimally utilised mainly because of its inadequacy to provide proper services and relatively unfavourable attitudes of the people towards it. The major inadequacies relate to poor quality of services, non-availability of staff, lack of empathy of the staff and poor management. Energising existing infrastructure with a view to optimising its output is an area requiring priority attention. Towards this end, some major steps are being taken which include clear delineation of job responsibilities, filling up of vacant posts, improving employees' motivation and service conditions, improving skill and capabilities of the staff, improving PHC management system by devising appropriate monitoring and supervision systems.

**11.8.2** These measures will lead to a favourable perception of the health facilities by target groups and optimal utilisation of the existing infrastructure.

**11.8.3** The position regarding the network of health and family welfare infrastructural facilities created in the rural areas of the country over different Plan periods is given below:

Functionary/ Service Centre	Norm	Position as on 30.06.90
1	2	3
Trained Birth Attendant (DAI)	At least one from every village	500606



1	2	3
Village Health Guide	For each village/1000 population	410835
Sub-Centre	For every 5000 population in plain areas and for 3000 population in tribal, hilly and backward area	130392
Primary Health Centre	For every 30000 population in plain area and 20000 in hilly and tribal area	20531
Community Health Centre	For every 80000 to 120000 population serving as referral institution for 4 PHCs.	1852 (1.4.90)

## 11.9 Services And Supplies

11.9.1 Services and supplies are provided entirely free of cost at various levels of the health delivery system according to the facilities available. While the services are available at district and sub-divisional hospitals and above, the Primary Health-cum-Rural Family Welfare Centres provide all services except female sterilisation (many PHCs are now providing this service also) and the Sub-centres manned by Auxilliary Nurse Mid-wife (ANMs) usually provide only non-terminal methods other than IUD (IUD insertion is also being carried out in many Sub-centres after appropriate training of ANMs/LHVs).

## 11.10 Incentives

10.10.1 Incentives which seek to directly influence fertility behaviour can play a crucial role in population control strategy. At present, some incentives are available to the employees of Central Government, Public Sector Undertakings and State Governments, Central Government does not give any incentives to the members of the general public except, a small amount by way of compensation for the loss of wages. Some States have introduced incentives in the form of lottery tickets scheme and a scheme of is-

suing Green Cards which entitles the acceptors of sterilisation with two or less children preferential treatment in certain areas. States like Gujarat, Maharashtra and Himachal Pradesh have introduced schemes of giving long-term bonds to the acceptors of sterilisation having daughters only with a purpose to counter desire to have son(s). Other States/UTs have been advised to introduce such a scheme, if their resources so permit.

11.10.2 A package of incentives/disincentives for Government servants has been framed and is under examination of Ministry of Personnel and Public Grievances.

## 11.11 Strategy for National Family Welfare Programme

11.11.1 The Family Welfare Programme can no longer be considered as the exclusive responsibility of Ministry of Health and Family Welfare alone. It has to be taken as a national problem and all Ministries/Departments of Government of India should internalise the Family Welfare components in all their developmental schemes. The current strategy to control the population growth in the country includes following components:

(i) *Increase in mean age at marriage:* It is proposed to raise the mean age at marriage for women beyond 20 years. The existing enactment relating to Child Marriage Restraint Act is proposed to be modified. Higher punishment is also being proposed for violation of the provision of the act.

(ii) *Raising the Status of Women:* A significant impact on fertility can be brought about when the status of women is raised and they become equal partners in decision making. The nodal responsibility for this lies in Department of Women and Child Development in the Ministry of Human Resource Develop-



ment. That Department has to coordinate various schemes and activities designed to raise the status of women.

(iii) *Improved communication approaches:* Communication approach which earlier emphasised on demographics and family planning propoganda has been replaced by social communication approach encompassing various areas that impinge on family planning acceptance. Efforts have been made to integrate health and family welfare messages and to make them more 'people-sensitive' and 'local-specific'. A shift has been achieved in media strategy from paid publicity to wider involvement of various agencies by soliciting their support for the programme as their social responsibility. Doordarshan and AIR are giving free time for telecasting/broadcasting family welfare messages. Railways are giving free time on close circuit T.V. and public address system and for displaying hoardings on family welfare on concessional rates. Over the past six years 110 video spots and longer duration programmes and 98 films were produced and 25,000 prints distributed to Field Units. 27 and 15 booklets were designed and printed in all 14 major languages—about 105 lakh pieces distributed. Over 25,000 song and drama performances were organised annually by Ministry of Information and Broadcasting using local theatre groups in rural areas and 60,000 film shows in major towns and villages. Delhi Administration has used all its administrative units to give free outdoor and print publicity on a large scale. Example of Delhi has been commended for emulation by all other States/UTs. Parliamentarians, Cooperatives, Voluntary Organisations, Organised Sector, Trade Unions, State Health Personnel and Media Professionals are being oriented to have broader perspective on family welfare issues. Thrust has also been on involvement of leading media institutions and organisations such as Indian Space Research Organisation, National Institute of Design, National Film Development Corporation and E.T.D.C. in development of Family

Welfare and Health Video film materials and setting up of direct mailing schemes by the Ministry of Health to back up TV and print communication efforts.

(iii) (a) An IEC Project in the States of Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan was launched in January, 1988. The aim of the project is to activate inter-personal channels to create a synergy with the mass media efforts to improve communication between the people and primary health care functionaries.

(iii) (b) Projects to induct population education in school education system in adult education programme, in higher education system and in vocational training are being implemented by the Ministries of HRD and Labour respectively. The major thrust of these projects is the on-going programme through curriculum development integrating population education in teaching—learning materials, training of teachers/instructors and co-curriculum activities.

(iv) *Social Marketing of Contraceptives:* With a view to promoting the use of 'Nirodh' for spacing, a social marketing programme was launched in 1968 with the active participation of 12 large companies. A similar programme for popularising the use of Oral Pills has been launched from the 20th November, 1987.

(v) *Promotion of Non-Governmental Organisations:* (a) The voluntary organisations form an integral part of approach towards community participation under the Family Welfare Programme. Government is giving financial assistance to them for MCH, Immunisation and Family Planning services. There are about 550 voluntary units working under this assistance programme.

(b) It is proposed to involve the voluntary organisations, organised sector and the corporate sector in Family Welfare Programme implementation in bigger way. Already a Standing Committee on Voluntary



Action has been set up for encouraging grass-root level Voluntary Organisations to take up Family Welfare projects relating to MCH, Immunisation, Family Planning and improvement in Health standard in rural and urban slum areas.

(c) Meetings have been held with the representatives of the trade unions, cooperative sector and industrial sector and the action points requiring their involvement have been indentified and are being pursued.

(vi) *Updating of eligible couple registers:* Steps are being taken to make the eligible couple registers authentic documents. Their correctness is to be ensured through fool-proof methods.

(vii) *Infrastructure:* Instructions have been issued to the State Governments to fill up all vacant posts, to set up Cabinet Sub-Committees in each State to monitor implementation of family welfare and the related programmes and also hold regular meetiangs of the "Core Group" in the States. The "Core Groups" in the States consist of Health Minister, Health Secretary, Chief Secretary and Director of Health Services and Family Welfare under the Chairmanship of Chief Minister of the State.

(vii) (a) In order to strengthen supervision, a revised staffing pattern has been formulated and the States have been given sufficient flexibility to suggest their own requirements of staff within an upper budgetary ceiling of 7.5% of expenses on Direction and Administration.

(vii) (b) Training Programme for various categories of staff are being arranged in order to upgrade the skills and capabilities of the staff.

(vii) (c) The staffing pattern has been reviewed and sanctioned for U.P., Bihar, Delhi, Punjab and Goa. There are no funds available to absorb any additional liability during the current financial year.

In view of this, the revised staffing pattern of the other States has been kept in abeyance till adequate funds become available.

(viii) *Upgrading Technical Services:* A Committee on Technical Matters consisting of experts has been set up.

(viii) (a) Laparoscopic training facilities are being expanded and 20 Laparoscopic Training Centres have been set up so far. To strengthen the services at PHC level, schemes for providing crash training to Medical Officers, LHV's/ANMs in various methods of contraception have been formulated.

(viii) (b) Additionally, a number of steps have been taken to improve the quality of family welfare services which are as follows:

1) Liberal grants are given to States/UTs and other Voluntary Organisations to improve facilities for operation theatre, recovery rooms, wards and labour rooms etc.

2) Supply of standard equipment and instrument for better services in the National Family Welfare Programme. The best quality of laparoscopes and KLI tubal rings are being procured from UNFPA under commodity assistance programme and also purchased by the Government of India through DGS&D for supply to States/Service Centres like those of members of IMA etc. Laparoscopes are being provided to IMA members at 50% subsidised cost.

3) A centre of Bio-medical Engineering has been established at IIT, Delhi to assure best quality of IUD/Tubal rings and other family welfare devices for use under family welfare programme. Besides, ICMR is assisting in clinical testing of the family welfare devices before they are introduced in the programme. This Centre is also being notified as a National



Laboratory for Testing IUDs/Tubal rings by the Ministry of Health and Family Welfare.

4) Family Welfare Programme is currently assuring quality services to the acceptors of family welfare methods and for this purpose 4 centres of excellence in standards for male and female sterilisation and micro-surgical recanalisation have been established at Bombay, Calcutta, Delhi and Madras. Further, 12 more centres are being established in major States. These centres are to train doctors working at the various peripheral centres in standards for male and female sterilisation and recanalisation particularly from 'A' type Post-Partum Centres.

5) Establishment of Surveillance and monitoring systems for sterilisation programme in Rajasthan and Tamil Nadu for getting a feedback about quality of sterilisation services under the programme is being contemplated.

6) MTP services are being expanded and doctors are being trained in MTP techniques on year to year basis. MTP Suction Aspirators are being supplied to those PHCs where the doctors have already been trained in MTP techniques and the physical facilities for undertaking MTP activities are available.

7) The State / UT Government have constituted State / District Quality Assurance Committees to oversee the complications and mortality occurred due to sterilisation/IUDs/MTP. These committees also investigate into the causes of death with the ultimate objective of eliminating mortality to the extent possible. These Committees have also been entrusted with the job of investigation of causes of maternal deaths.

8) Steps are afoot to introduce new and effective contraceptives like Norplant 6, Injectables, Vaginal rings and Weekly Oral Contraceptive Pill.

11.11.2 *National Family Welfare Awards:* Incentives by way of cash awards which were being given earlier in the States/UTs for the best performance have been discontinued from 1988-89.

#### 11.12 New Initiatives

11.12.1 The Department has taken a number of new initiatives as part of revised strategy for accelerated acceptance of Small Family Norm. Some of these are indicated below:

i) A proposal for introducing a package of incentives/disincentives for Central Government Employees, Employees of Central and State Government Undertakings and Employees of the Organised Sector has been formulated and is under examination with the Department of Personnel.

ii) A proposal for amendment of the Child Marriage Restraint Act in order to raise the minimum age of marriage and to provide for stricter enforcement of the provisions of the Act is under consideration. As advised by the Ministry of Law and Justice, State Governments are being consulted in the matter.

iii) A Cabinet Note for amendment of the Constitution of India to incorporate promotion of Family Welfare, Population Control and Small Family Norm in the "Directive Principles of State Policy" and "Fundamental Duties" is being sent to the Cabinet Secretariat for obtaining approval of the Cabinet.

iv) Amendments to the 'Maternity Benefit Act' and 'Employees State Insurance Act' have been suggested to the Labour Ministry for stepping



up the Family Welfare Programme in the Organised Sector.

v) All the States/UTs have been requested to amend the relevant Acts and Rules relating to Urban Local Bodies and Panchayati Raj Institutions, to assign the duty of 'Promoting Population Control, Family Welfare and Small Family Norm' to these institutions if no such provision already exists.

vi) A Cabinet Note in regard to banning the use of Sex Determination Tests in the country has been finalised and has been sent to the Cabinet Secretariat for obtaining approval of the Cabinet. After approval of the Cabinet, it is expected to be introduced in Parliament.

vii) A Cabinet Note on "Population Control and Family Welfare Programme" outlining our future strategy has been prepared and circulated in related Ministries/Departments for obtaining their views/remarks thereon. After incorporating the views of the concerned Ministries/Departments, the Note will be submitted for directions of the Cabinet.

viii) The existing scheme of compensation for sterilisation/IUD insertions is being amended with a view to give flexibility to States to utilise the available funds in the most optimal manner, promoting spacing methods more vigorously and securing involvement of youth in the Family Welfare Programme.

ix) A nodal agency for non-Government efforts—a registered society like CAPART is proposed to be set up to give a new thrust to the Family Welfare Programme in the Voluntary Sector.

x) A detailed time-bound scheme has been taken up to provide Universal Immunisation to mothers and children by the year 1990 aimed to protect all pregnant women with two doses of tetanus toxoid and all the infants with DPT, Oral Polio, BCG and Measles vaccines. The programme was taken up for implementation in 31 districts in the year 1985-86 and has been expanded to cover the entire country during the year 1989-90. Augmentation of the cold chain system for maintaining the potency of vaccines particularly of Oral Polio Vaccine, sustained effort at ensuring immunisation particularly of the children in first year of their life and active surveillance with particular emphasis on surveillance of polio cases are the major aspects of the Programme.

11.12.2 All the above initiatives are expected to have a salutary effect on the overall acceptance of small family norm by the eligible couples who are being approached through all available media of communication.

11.12.3 Progress made in various components of the programme during the year under report is discussed in more detail in the ensuing chapters.



## BUDGET OUTLAYS AND EXPENDITURE



**T**he family welfare programme is being implemented as a Centrally sponsored scheme under which cent percent Central assistance is provided to the State Governments for implementation of the programme and for providing services and facilities to the people for the purpose.

### 12.2 Expenditure in Successive Plans

12.2.1 In order to achieve the demographic goals, the financial outlays under the programme have been increasing over the successive Five Year Plans. The comparative figures of expenditure under the programme in the Public Sector from the First to Seventh Five Year Plan is given in Table—I in facing column.

12.2.2 The main reason for sharp increase in the expenditure is that the

**TABLE—I**  
**Expenditure Under Family Welfare  
Programme from I to VII Plan**

<i>Period</i>	<i>(Rs. in Crores)</i> <i>Expenditure</i>
First Plan (1951-56)	0.14
Second Plan (1956-61)	2.15
Third Plan (1961-66)	24.86
Annual Plans (Inter Plan 1966-69)	70.46
Fourth Plan (1969-74)	284.43
Fifth Plan (1974-78)	408.98
Annual Plan (1978-79)	107.60
Annual Plan (1979-80)	118.50
Sixth Plan (1980-85)	1485.73
Seventh Plan (1985-90)	3256.00
	(Outlay)



committed liability of the previous Plans has been passed on to the successive Five Year Plans. This is a unique feature of the Family Welfare Programme in that no liability of the previous Plans has either been transferred to the Non-Plan budget of the States or of the Central Government, unlike other developmental programmes of the Government of India. The Ministry of Finance and Planning Commission were consulted in the matter and on their approval, Department of Family Welfare has requested the Finance Commission to pass on the Plan schemes of committed nature of non-Plan schemes during the 8th Five Year Plan either of

State Government or of concerned Central Government Departments. This will help in initiating new schemes within the domain of Plan scheme and the Plan size will also not look very formidable. The decision of the Finance Commission is awaited.

### 12.3 Scheme-wise Outlays

12.3.1 Against an allocation of Rs. 653.00 crore for 1989-90 an outlay of Rs. 675.00 crore has been provided for 1990-91. The scheme-wise outlays and departmental figures of expenditure during 7th Five Year Plan are as under :—

### Statement

#### State-wise Outlays/Expenditure during 6th Plan Under F.W. Programme

(Rs. in Lakhs)

Name of Scheme	Expenditure During					Approved Outlay 1990-91
	1985-86	1986-87	1987-88	1988-89	1989-90	
Services & Supplies	27439.91	33677.91	36031.63	38805.52	41484.70	33294.64
Training	240.55	253.92	607.68	569.93	915.00	682.00
I.E.C.	1119.32	828.60	1135.46	1365.18	1185.18	1650.00
Research & Evaluation	293.06	1468.97	770.32	2119.56	1578.82	1198.36
M.C.H.	7710.68	11400.89	12729.35	15884.47	19665.00	19025.00
Organisations	1076.64	918.80	915.54	2259.86	2010.00	1150.00
V.H.G.	3393.87	2420.29	2321.22	2454.94	1800.00	5000.00
Area Projects	6693.75	5916.04	3906.01	3521.45	8996.00	5500.00
Total	47967.78	56885.42	59076.67	67184.44	78139.52	67500.00

### 12.4 Outlays for Important Schemes

12.4.1 *Rural Family Welfare Centres:* The Rural Family Welfare Centres have been sanctioned at all block level PHCs sanctioned upto 1.4.1980 to provide Family Planning and MCH services in rural areas. There are 5435 such centres functioning

in the country as on 1.4.1990. Since all block level PHCs sanctioned upto 1.4.1980 have been covered, no new rural family welfare centre is envisaged to be sanctioned. A provision of Rs. 113.92 crore has been made in the B.E. 1990-91 for continuation/maintenance of these 5435 Rural Family Welfare Centres.



**12.4.2 Rural Sub-Centres:** In order to provide comprehensive Primary Health Care Services at the grass-root level, it is envisaged to have one Sub-centre for every 5000 rural population in plain areas and 3000 population in the tribal and hilly areas. These Sub-centres are the only peripheral health institutions which provide basic Health and Family Welfare Services to the rural population. 130390 Sub-centres are functioning as on 1.4.90 as against 84,053 as on 1.4.1985. It is proposed to establish the remaining sub-centres by the end of March, 1992. A provision of Rs. 100.00 crore has been made in the B.E. 1990-91 for continuation of Sub-centres already established/proposed to be established during the current year.

**12.4.3 Urban Family Welfare Centres:** With a view to providing Family Welfare and MCH services in urban areas, 1592 Urban Family Welfare Centres have been sanctioned in the country. With a view to improving out-reach service delivery system in urban slums, Urban Revamping Scheme has been introduced. The scheme of revamping of urban family welfare services envisaged reorganisation of existing Urban Family Welfare Centres/establishment of various categories of health posts in the cities/towns with more than 100,000 population and having at-least 40% of population residing in the slum areas. So far, 936 health posts under the scheme have been sanctioned by Govt. of India.

**12.4.3 (i)** A provision of Rs. 17.00 crore has been made in the B.E. 1990-91 for maintenance of Urban Family Welfare Centres and revamping of Urban level organisations.

**12.4.4 Maternal and Child Health:** In order to enhance acceptability of Family Planning Programme, the need for improving chances of child survival has been widely accepted. The objective under the scheme is to achieve reduction in Infant Mortality Rates to below 60 per 1000 live

births and child mortality rate to 10 per thousand by the year 2000 A.D. To move towards this direction, it was decided to intensify the following programmes during the 7th Plan :—

1. Immunisation against preventable childhood diseases;
2. Prophylaxis against anaemia and blindness; and
3. ORT for control of deaths due to diarrhoeal diseases.

**12.4.4 (i)** Recognising the potential of immunisation as a low cost efficient technology for child survival, Universal Immunisation Programme was launched in 1985-86 in 31 districts, and catchment areas of 50 medical colleges. As on 1.4.90, all districts in the country have been covered under Universal Immunisation Programme. The importance of the programme can be judged by the fact that it is one of the five Technology Missions launched in the country.

**12.4.4 (ii)** A provision of Rs. 90.25 crore has been made in the B.E. 1990-91 for the purpose.

**12.4.5 Transport:** Recognising the fact that mobility plays a crucial role in effective supervision and providing out-reach service delivery system, vehicles at various levels are provided to States by the Government of India. Assistance for maintenance of these vehicles, @ Rs. 15000/- per annum per petrol driven vehicle and Rs. 9,500/- per annum for diesel driven vehicle is provided. Besides, old unserviceable vehicles are replaced at the rate of approx. 10% of total fleet of 7788 vehicles every year.

**12.4.5 (i)** A provision of Rs. 10.00 crore exists in the B.E. 1990-91 for maintenance of existing vehicles and replacement of old unserviceable vehicles.

**12.4.6 Compensation:** To compensate



acceptors of IUDs as well as terminal methods of Family Planning against the loss of wages, cash compensation at the following rates is admissible :—

Vasectomy — Rs. 180 per case

Tubectomy — Rs. 200 per case

I.U.D. — Rs. 12 per case (Rs. 15 if the acceptor has two or less children).

12.4.6 (i) A provision of Rs. 100.00 crore exists in the B.E. 1990-91 for the purpose.

12.4.7 *Post-Partum Programme*: The Post Partum Programme is a maternity-centred hospital-based approach to Family Welfare Programme. The objective of the programme is to provide anti-natal, natal and post-natal services to expectant mothers and also to provide family planning services, besides diagnosing early cases of cervical cancer. A total of 554 District Level Hospitals have been covered with a Post-Partum Centre and the programme is also extended to Sub-Divisional Hospitals in a phased manner. So far, sanction for establishment of 1075 Post-Partum Centres at Sub-Divisional level hospitals have been issued as on 1.4.90. It is proposed to extend the scheme to 825 such hospitals during 8th Five Year Plan. A provision of Rs. 23.21 crore exists for the programme in B.E. 1990-91.

12.4.8 *Supplies of Contraceptives for Spacing Methods*: Recognising the fact that more number of younger couples are entering the reproductive age group, terminal methods of Family Planning, namely, sterilisation cannot be advocated for them. To respond to the needs of younger couples, various contraceptives under spacing methods of family planning such as oral pills, condoms, Cu-Ts, etc. are offered under the programme.

12.4.8 (i) A provision of Rs. 33.40 crore exists under the programme during 1990-

91 for supply of contraceptives—both free and under social marketing.

12.4.9 *Information, Education and Communication*: In order to achieve wider adoption of Family Planning methods, a broad based information, education and communication approach has been adopted. The activities under this scheme are carried out by respective Mass Education and Media set-ups created in the States and Media units of the Ministry of Information and Broadcasting. These activities are coordinated and monitored by the Mass Education and Media Division at the Centre which prepares prototypes, formulates policies and provides guidelines and support for the operationalization of the total media endeavour in the country to promote family welfare and popularise the small family norm.

12.4.10 *Training*: The success of Family Welfare Programme depends, to a large extent, upon the availability of qualified, trained and educated workers. Considering the nature of Family Welfare Programme where one dissatisfied acceptor will have long lasting adverse effects on the programme, the need for having properly and adequately trained manpower under the programme can hardly be over-emphasised. Training is, therefore, given due weightage under the programme.

12.4.10 (i) The training at various levels is imparted through the network of Health and Family Welfare Training Centres, F.W. Training Research Centre, Bombay, PHCs and Sub-centres.

12.4.11 *Area Projects*: India is a vast and diversified country. The States do vary in terms of socio-economic, cultural and value systems and as such a uniform pattern of infrastructure cannot be advocated for all States. The scheme was initiated in the beginning of the 6th Five Year Plan to improve Health and Family



Welfare Delivery System in certain identified backward districts of the country so as to hasten its development at par with the national average. The scheme continued during the VII Plan and 78 districts in 15 States were covered upto VII Plan period. The scheme was started with partial financial assistance from five donor agencies viz. World Bank, UNFPA, ODA(UK), USAID and DANIDA.

12.4.11 (i) A provision of Rs. 55.00 crore has been made in the B.E. 1990-91 for the purpose.

12.4.12 *Village Health Guide*: The Village Health Guide Scheme aims at training a local person preferably a woman from the community in Primary Health Care so as to provide relief to them in common ailment conditions. Under the scheme, Health Guides are selected by the village community for every 1000 population or a village and is provided a kit of simple medicines and an honorarium of Rs. 50/- per month. As on 31-3-90, 3.27 lakh VHGs were in position of which 0.85 lakh are males.

12.4.12 (i) A provision of Rs. 50.00 crore has been made in the B.E. 1990-91 for the scheme.

## 12.5 Supply of Vehicles to States

12.5.1 Mobility is a part of the Plan and is one of the most important factors for effective implementation of the Family Welfare Programme. It is in this context that the Department is supplying vehicles to the States. The norms for supply of these vehicles for the implementation of F.W. programme have been laid down which are as under:—

1. Primary health Centre/Rural F.W. Centre	— One vehicle for each PHC/RFWC (Supplied by Govt. of India or UNICEF)
2. District F.W. Bureau	— 1. One Supervisory vehicle 2. One vehicle for AV Unit

3. State F.W. Bureau	— 1. Two Supervisory vehicles 2. One vehicle for AV unit
4. Rural Health & F.W. Training Centre	— Three vehicles for each Training Centre
5. Post-Partum Programme	— One vehicle for each Centre

12.5.2 *Replacement of condemned vehicles*: The Ministry is presently replacing the vehicles supplied by this Department as and when they are condemned subject to the availability of funds.

12.5.2 (i) In accordance with the policy of replacement approved by the Planning Commission during the 7th Plan, a target of 10% of vehicles was fixed for replacement every year. As such, it was necessary to replace about 4000 vehicles during the total 7th Plan period. As against this, only 2600 vehicles could be replaced. Though 1400 vehicles were to be replaced upto the end of March, 1990 to fulfil the target of 7th Plan, this could not be done because of the following reasons:

(a) The States could not do the required condemnation of vehicles; and

b) Paucity of funds.

12.5.3 *POL/Maintenance Charges*: The rates of POL have been laid down vide this Department Circular No. M. 12012/5/85-FWB(PLY) dated 6.5.1986 and circular of even number dated 24.5.1986. The present rates as have been communicated to the States in the above circulars are as under:—

For FW Vehicles	Petrol driven vehicles	Diesel driven vehicles
1	2	3
(a) 1. Petrol oil lubricants and minor repairs done by the vehicle users	Rs. 15,000/p.a. per vehicle	Rs. 9,500/- p.a. per vehicle



1	2	3
2. Major repairs/ maintenance	—	—
(b) For UNICEF vehicles	Rs. 8,000/- p.a. per vehicle	Rs. 5,000/- p.a. per vehicle

12.5.3 (i) For those PHCs where vehicles have not been supplied, POL charges are paid to the States/UTs @ Rs. 9,500 /per annum for every such PHC to enable them to hire a vehicle.

12.5.3 (ii) The present rates of POL as indicated above were considered inadequate because the States are of the view that the vehicles provided have to ply on different roads consisting of different types of terrains like hilly, sandy, muddy, kutchha etc. In such conditions the vehicles could not give normal KMPL which they should otherwise give on plain roads. Most of the States have, therefore, raised this issue in different forums stating that the present rates of POL are inadequate. Apart from this, the States say that this money is inclusive of maintenance costs which have gone up considerably. Keeping in view these aspects and difficulties posed by the States, the matter was taken up with the Planning Commission and the Planning Commission has accordingly approved the proposal in principle that the rates for POL and maintenance charges should be revised subject to the availability of resources with the Ministry. The revised approved rates are as under:—

a) Rs. 15,000/- p.a. for diesel driven vehicles

b) Rs. 20,000/- p.a. for petrol driven vehicles

12.5.3 (iii) However, this decision could not be implemented due to shortage of funds during the last Five Year Plan and in the Current Five Year Plan also.

12.5.4 *Vehicles for new PHCs:* Presently vehicles have been provided only to the

PHCs created as on 1.4.1980 at the Block level. Planning Commission has approved the scheme to provide vehicles to all PHCs including those created after 1.4.1980. As on 1.4.1980, there were 5433 PHCs functioning. We have provided vehicles only to these PHC. But we are yet to provide mobility for 16288 PHCs created after 1.4.1980. Funds for these vehicles have also been projected in the Eighth Plan and the supplies will be started subject to the availability of funds. The position regarding the present availability and entitlement of vehicles is reflected below:

**Position of Family Welfare Vehicles  
as on 31.10.1990**

Sl. No.	Name of State/ UT	Entitlement	Availability	Remarks
1	2	3	4	5
1.	Andhra Pradesh	549	549	—
2.	Assam	213	213	—
3.	Bihar	759	759	—
4.	Gujarat	363	363	—
5.	Haryana	150	150	—
6.	Himachal Pradesh	132	132	—
7.	Jammu & Kashmir	130	130	—
8.	Karnataka	395	395	—
9.	Kerala	255	255	—
10.	Madhya Pradesh	680	680	—
11.	Maharashtra	598	598	—
12.	Maghalaya	42	44	2 Excess
13.	Manipur	47	49	2 Excess
14.	Nagaland	33	33	—
15.	Orissa	411	463	52 Excess
16.	Punjab	204	204	—
17.	Rajasthan	391	391	—
18.	Sikkim	24	27	3 Excess
19.	Tamilnadu	510	510	—
20.	Tripura	37	45	8 Excess
21.	Uttar Pradesh	1227	1227	—
22.	West Bengal	440	440	—
23.	A & N Islands	6	8	2 Excess
24.	Arunachal Pradesh	7	7	—
25.	Chandigarh	4	6	2 Excess
26.	D & N Haveli	3	5	2 Excess



1	2	3	4	5
27.	Delhi	29	36	7 Excess
28.	Goa, Daman & Diu	24	27	3 Excess
29.	LMA Islands	8	8	—
30.	Mizoram	25	25	—
31.	Pondichary	19	19	—
Total Entitlement =		7715		
Total Availability =		7798		

12.5.5 *Monitoring and Evaluation of the available fleet*: Monitoring and evaluating the available fleet are undertaken with a view to ensuring optimum and gainful utilisation. This is being done by our Transport Team by visiting the States periodically. During this year the Team has visited five States: U.P., M.P., West Bengal, Tamilnadu and Orissa.



## FACILITIES AND SERVICES



**I**n order to enable eligible couples to adopt small family norm as a way of life, the needed facilities and services for the purpose have been created throughout the length and breadth of the country. A great deal of attention is being paid to provide improved and modern facilities for contraception by ensuring high quality of services through well-trained medical and para-medical staff functioning in the network of infrastructure created both in urban and rural areas.

13.1.2 Special care is taken towards maintaining a high quality and standard of services which can generate confidence among the acceptors about the efficacy and safety of the contraceptive methods. Quality assurance has recently been introduced in the programme for the purpose. Adequate monitoring is done to ensure quality control, eliminating risk factors of

fatalities and minimising complications in surgical procedures, medical termination of pregnancies, non-terminal methods and the entire gamut of technical operational services available to the eligible couples under the programme.

### 13.2 A Cafeteria Approach in Method Choice

13.2.1 Acceptance of family planning is basically related to the felt needs of eligible couples to limit their family size. Since the eligible couples constitute a diverse group of people, acceptance of family planning methods ultimately depends on the perceived needs of this group. Under National Family Welfare Programme, therefore, a cafeteria approach has been made available with the option to the acceptors to select the method best suited to their requirements.



13.2.2 All these methods have been scientifically tested and only after ensuring their harmlessness and safety for the users, these have been introduced under the family welfare programme. Wherever para-medical personnel have been involved in administering a method like IUD/Oral pill suitable training and a check-list has been provided to them for selection/screening of the cases. These methods are broadly divided into three categories viz. terminal, non-terminal and natural methods. Vasectomy (Sterilisation of the male) and Tubectomy (Sterilisation of the female) fall under terminal methods whereas Intra-Uterine Devices, Condoms (Nirodh), Oral Pills and Diaphragm are offered as spacing methods. Guidance is also provided about natural methods, which do not require use of any contraceptive device viz. *Coitus Interruptus* (Withdrawal), Prolonged Lactation (breast feeding) and Rhythm method or Safe period. In case a pregnancy occurs as a result of contraceptive failure or if due to certain reasons the woman does not want to continue with pregnancy, the facilities for therapeutic abortion are offered within a reasonable time limit of pregnancy to ensure safety of the mother, according to the provisions of Medical Termination of Pregnancy Act.

### 13.3 Newer Contraceptives

13.3.1. In the meetings of the Expert Committee on Technical Matters held in August, October, 1990 and in January, 1991, the Ministry have taken a decision to introduce the newer contraceptives viz., net-en injectables, Norplant Six, Vaginal Rings, Centchroman, a Weekly Oral Pill contraceptive in the National Family Welfare Programme to offer a variety of the family planning methods over and above the existing family planning methods made available as a cafeteria approach. The necessary follow up action is in process for introduction of these newer contraceptives in the National Family Welfare Programme expeditiously in consultation with the Drug Controller

(India), Directorate General of Health Services.

### 13.4 Procurement and Supply

13.4.1. At present, Cu.T. and Oral Pill Contraceptives are procured Centrally and distributed to the various States and UTs. under free distribution system.

13.4.2 *I.U.D* (Cu.T.): The Cu.T. are imported mainly through UNFPA/USAID as commodity assistance for free supply to the States/UTs under the Family Welfare Programme. Copper-T is imported through DGS&D sometimes. Some firms in India have taken up indigenous production and samples are under test.

13.4.3. Against the annual target of 64.00 lakh pieces of IUDs under Free Supply for 1990-91, 21.32 lakh Cu.Ts. have been released for distribution to the various States/UTs so far during 1990-91 (Upto 25.10.90). This is in addition to the pipeline stock available with States/UTs as on 1.4.1990.

13.4.4. *Oral Contraceptive Pills (Mala-'N')*: The Oral Pill Contraceptives under the brand name Mala-N are being made available for free distribution to all the States and UTs. Necessary raw material required for the formulation of pills is imported through UNFPA as commodity assistance.

13.4.4. (i) Against the Annual Target of 233.10 lakh cycles for 1990-91, 94.89 lakh cycles of pills have been released for distribution to the various States/UTs during the year 1990-91 upto 25.10.1990 in addition to sufficient pipeline stock available with the States/UTs as on 1.4.1990.

### 13.5 Procurement of Laparoscopes/Tubal Rings from UNFPA

13.5.1. The Ministry have been getting KLI laparoscopes (Single/Double Puncture) and KLI laparocators; Karl Store laparoscopes (Single/Double Puncture) from UNFPA under the commodity assist-



ance programme. These brands of laparoscopes are currently approved by the Government of India for undertaking laparoscopic sterilisation operations under National Family welfare Programme.

13.5.2. During the year 1990-91, UNFPA supplied 420 KLI laparoscopes/laparocators and 180 Karl Sterz laparoscopes to the Ministry of Health and Family Welfare, Government of India.

13.5.3. These laparoscopes/laparocators are being supplied to States/UTs as per their requirements and norm fixed by the Government of India. There is a provision of supplying a minimum of 2 laparoscopes per trained team available in States/UTs. The number of laparoscopes/laparocators supplied and available in States/UTs and various institutions upto 31st march, 1990 was 5,445 while the number of teams trained/functioning in laparoscopic sterilisation techniques in States/UTs in this period was 4298.

13.5.4 UNFPA have also been supplying the standards KLI tubal rings for use in laparoscopes/laparocators for undertaking laparoscopic sterilisation operations under the National Family Welfare Programme to avoid failure of sterilisation and simultaneously to ensure quality assurance to the acceptors of sterilisation. A total of 3.00 million KLI tubal rings were supplied by UNFPA during 1990-91 and also 3.00 million during 1989-90. Sufficient stock of KLI tubal rings is available with the Ministry to meet the requirements of States/UTs during the year 1990-91. KLI tubal rings (in pairs) supplied to States/UTs as on 31-12-90 totalled 11,66,500.

### **13.6 Crash Training Programme for Medical Officers at PHCs in MTP Techniques and other Surgical procedures etc., in the States of Bihar, Madhya Pradesh, Rajasthan and U.P.**

13.6.1 It has been brought out in a

number of family welfare studies conducted by the Indian Institute of Management, Ahmedabad etc. that the quality of services in the family welfare programme and its management activities need to be improved to a greater extent in the States of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh for tangible public response to family planning services in these States. With this aim in view, the Ministry of Health and Family Welfare have been implementing the Crash Training Programme, particularly for medical officers at PHCs in these four States in order to gear up the family welfare activities and simultaneously to reduce the failure and complications and improve facilities after sterilisation/MTP operations. In brief, the objectives of this training programme are as follows:—

- (i) To plan, implement and monitor the integrated programme for the provision of family welfare services including Maternal and Child Health and Immunisation.
- (ii) To plan, implement and evaluate training programme in Family Welfare for Community Leaders and other workers from other programmes in this area.
- (iii) To ensure community participation in the Family Welfare Programme.
- (iv) To ensure maintenance of eligible couples register vis-a-vis service facilities in contraception methods with systematic follow up services.
- (v) To create facilities at Primary Health Centres to undertake vasectomy, tubal ligation, minilap, MTP, IUD, Oral Pills and conventional contraceptives on a continuing basis all day of the week and also to arrange camps on specific days of the week to assist the laparoscopic sterilisation by a team either from the district or sub-taluka Post-partum centres.



- (vi) To organise IUD camps on specific day at each Sub-centre in addition to these facilities being available on all days of week on continuing basis.

13.6.2 During the year 1990-91 an amount of Rs. 76.00 lakh has been made available for implementation of the training programme in the said four States, which are lagging behind in achieving the targets for various methods of family planning vis-a-vis the rest of the States in the country. Though the training programme has been functioning in these States, yet there is an urgent need that the medical officers after training in M.T.Ps and other surgical procedures be followed up effectively as to how they have been catering to the needs of the people in the country side for quality assurance in the National Family Welfare Programme.

### **13.7 Medical Termination of Pregnancy (M.T.P.)**

13.7.1 The MTP Programme is being implemented in State sector with grants-in-aid from the Government of India, Ministry of Health and Family Welfare on year to year basis. A total of Rs. 32.78 lakh was allocated to State /UT Governments for the year 1990-91 for expansion of MTP Services. The scheme consists of the following important components:—

- (i) Setting up of a small MTP Cell at State/UT level wherever on an average 10,000 MTPs and above are undertaken for the last three years.
- (ii) Training of doctors in MTP techniques and other surgical procedures and spacing methods.
- (iii) Purchasing of MTP suction aspirators with ISI mark by State/UT Governments for supply of the same to PHCs, wherever doctors have been trained in MTP techniques and physical facilities like that of operation theatre etc., are

available for conducting MTP operations.

13.7.2 The work done on implementation of MTP Programme in State/UTs is monitored and evaluated through quarterly progress reports. Altogether 21,022 doctors have been trained in MTP techniques in the country as on 30.9.90..

### **13.8 Crash Training Programme for LHV/ANMs in IUD insertion and Oral Pills Administration.**

13.8.1 The trained manpower in any field of activities under National Family Welfare Programme (NFWP) plays an important role in boosting up of the family welfare programme. It further provides quality assurance to the acceptors of any of the family planning methods. The crash training programme for LHV/ANMs has got special significance in National Family Welfare Programme, as LHV/ANMs are considered to be the back-bone for accelerating the spacing methods viz. insertion of IUDs and oral pills administration, particularly in the country side, where the shortage of such personnel is generally felt.

13.8.2 The training for LHV/ANMs is being implemented by State/UT Governments in selected Post-partum centres functioning at State/District level hospitals and grant is being released to them on year to year basis.

13.8.3 The quarterly progress reports on LHV/ANMs trained in IUD insertion and oral pills administration is being received in T.O. Division of the Ministry of Health and Family Welfare for compilation/necessary analysis at National level. Based on the quarterly progress reports from States/UTs., a total of 35,909 ANMs and 13,000 LHVs against a target of 54,000 ANMs and 13,000 LHVs respectively, stipulated during the 7th Five Year Plan (1985-90), were trained as on 1.4.90



in IUD insertion and oral pills administration in States/UTs. The training programme will continue functioning during the Eighth Five Year Plan (1990-95) with 100 per cent grants under National Family Welfare Programme. An amount of Rs. 30.00 lakh has been made available to implement the above training programmes in States/UTs during the year 1990-91.

### **13.9 Central Laparoscopic Training Centres**

13.9.1 The Government have so far established 20 Central laparoscopic training centres in different pockets of the country. The training in laparoscopic sterilisation techniques is imparted by the Professor and Head, Department of Obstetrics and Gynaecology in the medical colleges/hospitals to a team consisting of a doctor, operation theatre nurse, sister and operation theatre technician, as and when they are deputed for training by the State Government concerned at the medical institutions. The minimum educational qualifications required by the doctor for this training programme are MD (Obst. & Gynae) or MS (General Surgery) or MBBS with DGO having worked for a minimum period of three years in a government hospital or any other medical institution. The training programme is of two weeks duration. 4105 teams have been trained upto the 30th September, 1990. The doctors so trained in laparoscopic sterilisation techniques help to ensure quality assurance, particularly in sterilisation activities under National Family Welfare Programme. An amount of Rs. 12.00 lakh has been made available for implementation of this scheme during the year 1990-91.

### **13.10 Centres of Excellence in Standards Sterilisation and Micro Surgical Recanalisation**

13.10.1 The U.N.F.P.A. project entitled "Establishment of Centres of Excellence for Training in Sterilisation and Recanalisation" was signed by the Government of

India in Ministry of Health and Family Welfare with UNFPA/AVSC in April, 1988 for a period of 5 years (1987-1992) with a view to achieve the following objectives under National Family Welfare Programme :—

- (i) To improve the techniques and quality of sterilisation services.
- (ii) To establish micro surgical facilities for male and female recanalisation training and services at regional centres of excellence.
- (iii) To establish 12 centres of excellence in selected States in India.
- (iv) To develop an effective quality control and assurance scheme for sterilisation and recanalisation services.

13.10.2 As a result of implementation of the said project by the Government of India in the Ministry of Health and Family Welfare, four regional centres of excellence for Training-cum-service in standard sterilisation and micro-surgical recanalisation have since been established at the following medical institutions in the country :—

- (i) K.E.M. Hospital & Seth G.S. Medical College, Bombay.
- (ii) R.G. Kar Medical College, Calcutta.
- (iii) Kasturba Hospital, Daryaganj, New, Delhi in collaboration with Maulana Azad Medical College, New Delhi.
- (iv) Kilpauk Medical College, Madras in collaboration with Medical College, Madras.

13.10.3 Efforts are underway to establish 12 centres of excellence at the selected medical colleges in States.

13.10.4 The core officers (viz. One Senior Gynaecologist and one Senior surgeon/Urologist) working at the selected medical colleges, who would be manning the Centres of Excellence at these medical colleges, were under training in standard sterilisation for male and female and in



standard micro-surgical recanalisation techniques at the regional centres of excellence functioning at Bombay, Calcutta, Delhi and Madras. The 12 centres of excellence in the selected medical colleges would start functioning shortly.

13.10.5 The doctors/medical officers in States/UTs are being trained in Standard Sterilisation for males and females at the four regional centres of excellence to ensure quality assurance to the acceptors of sterilisation under National Family Welfare Programme. It would further be accelerating the sterilisation programme in achieving the Net Reproduction Rate of Unity by 2000 A.D. A total of 254 doctors/medical officers were trained in standard sterilisation in States/UTs as on 31.12.90.

13.10.6 In a meeting of the Tripartite Review Committee held under the Chairmanship of the Additional Director General of Health Services (Public Health) on 2.4.90, it was recommended that the work relating to regular monitoring and evaluation of the project activities, particularly for assessing the impact of quality on sterilisation programme through local sample surveys etc. be transferred to National Institute for Health and Family Welfare (NIHFW), New Delhi which is a field agency of the Ministry of Health and Family Welfare. Also, it was recommended that the project activities, which were originally approved for the period from July, 1987 to June, 1992, may be extended upto the end of December, 1992. A recommendation was also made for enhancing the budget provision for the extended period upto the end of December, 1992. It was finally agreed to by UNFPA that the work relating to sample surveys etc., may be transferred to National Institute of Health and Family Welfare and also the project may be extended upto the end of December, 1992. Due to cost increase and additional requirements of equipment etc., the project budget was further raised by UNFPA from the original estimated expenditure

of \$ 1,743,900 to \$ 2,135,309 upto the end of December, 1992. The Government of India have accordingly been taking necessary action for transferring work relating to monitoring and evaluation of the project activities to NIHFW to enable them to start with the activities without any further loss of time.

13.10.7 *Budget and Expenditure* : An amount of Rs. 100.00 lakh has been made available for running four regional centres of excellence at Bombay, Calcutta, Delhi and Madras and for establishing 12 centres of excellence in selected States in the country. The amount released to four regional centres of excellence and expenditure incurred by them during the year 1989-90 and 1990-91 were as under :—

Regional Centre of Excellence	Budget Estimates/ released		Expenditure incurred	
	1989-90	1990-91	1989-90	1990-91
	(Rs. in lakhs)			
1. Bombay	5.75	6.00	2.15 (upto Dec. 90)	1.77 NA
2. Calcutta	5.75	6.00	1.10	NA
3. Delhi	5.75	6.00	6.80 (upto Sep. 90)	0.46
4. Madras	5.75	6.00	1.12 (upto Dec. 90)	1.01
Total	23.00	36.00	11.17	3.24

N.A — Information not available.

13.10.8 *Staff Working at Centres of Excellence* : The following core staff has been working at each of the Centre for Excellence functioning at Bombay, Delhi and Madras :

I. *Technical Staff*

1. Senior Obst. and Gynaecologist - One
2. Senior Surgeon (Urology/Plastic Surgery) - One
3. Operation Theatre Nurse - One
4. Operation Theatre Technician - One

II. *Secretariat Staff*

1. Programme Officer - One
2. Steno-typist - One



13.10.8 (i) The State Government of West Bengal, Family Welfare Department, Calcutta had not sanctioned the Secretarial Staff at Centre of Excellence, Calcutta during the period covered by this report.

13.10.9 *National Seminars on Centres of Excellence* : The Government of India held two national seminars on Centres of excellence one each at Calcutta from 04-04-1990 to 08-04-90 and at Madras from 29.10.90 to 1.11.90 during the period covered by this report. These seminars were attended by the Senior Officers in the Ministry of Health and Family Welfare and UNFPA/AVSC representative/consultants, core officers from four regional centres of excellence, State Family Welfare Officers of the concerned State Governments etc. Important discussions were held right from the management point of view in terms of administrative problems and bottlenecks faced in the working of the Centres of Excellence to the technical development in terms of devising/standardising evaluation proforma on the work done by these centres and reporting of post-sterilisation deaths and investigation into the cause(s) of these deaths at service centres and at higher echelons. At Madras seminar, the strategy for training of the Core Officers of the 12 new centres of Excellence in Standards sterilisation in male and female and micro-surgical recanalisation, which is to be imparted at the four regional centres of excellence, was adopted and finalised. The evaluation performae etc. were also finalised for introduction at the four regional centres of excellence to enable them to send the progress reports in these proformae to the Government of India for further analysis and necessary action at their level.

13.10.10 *Progress report on the work done by Centres of Excellence* : The Centres of Excellence are primarily concerned with the training-cum-service in standards sterilisation for male and female and micro-surgical recanalisation and holding of seminars/workshops etc., to further im-

prove the working of these centres. These Centres of Excellence at Bombay Calcutta, Delhi and Madras held numerous workshops on training of trainers in Standards Sterilisations for males and females during the period under report and trained a total of 254 doctors in these Workshops. During 1990-91 (upto September, 1990), the Centre at Bombay conducted 8 micro-surgical recanalisation operations for males and 8 on females; Delhi performed 25 each on males and females while the centre at Madras performed 8 recanalisations on males and 33 on females during this period in addition to performing 53 operations on females during 1989-90. Two conceptions each were reported for recanalisations done by Bombay on males and females while Delhi reported 12 conceptions for recanalisations on vasectomised cases and 4 for tubectomised cases. These Centres though sanctioned in 1987-88 started effective functioning only from 1989-90.

### 13.11 National Centre for Technological Evaluation of IUDs and Tubal Rings, at Indian Institute of Technology, New Delhi.

13.11.1 A National Centre for Technological Evaluation of IUDs and Tubal Rings was set up at the Centre of Bio-medical Engineering, Indian Institute of Technology, Hauz Khas, New Delhi by the Ministry of Health and Family Welfare in collaboration with UNFPA during 1988-89 with the following pattern of grants from the Ministry of Health and Family Welfare and UNFPA :

Year	Government of India's contribution (in Rs.)	UNFPA Contribution	
		(in \$)	(in Rs.)
1988-89	50,000	3,98,750	52,00,000
1989-90	4,00,000	3,05,050	40,00,000
1990-91	7,50,000	1,25,750	17,00,000

13.11.2 The above Centre is mainly concerned with the testing of IUDs/Tubal



Rings bio-technically before these articles could be introduced in the National Family Welfare Programme for Quality Control/assurance in the working of these devices under the family welfare programme. The quality of these devices would go a long way in the prevention of failure of laparoscopic sterilisation operations and other untoward incidence of complications after laparoscopic sterilisation operations and IUD insertions. The centre has now been imparting training on quality assurances of these devices to the local manufacturers of Copper-T-200 B IUDs. It is also collaborating with the Indian Council of Medical Research in a programme for substitution of indigenous materials in a programme for Copper-T 200 B IUDs and its components, which are so far being imported by the local manufacturers in the country. A short term training course for the benefit of local manufacturers of Copper-T 200 B IUDs was held at the Centre from 1st to 17th August, 1990 under the supervision of Dr. Michael Ainsfeld, a consultant from UNFPA. The said centre is under recognition by the Government of India as one of the National Laboratories in the field of bio-technology. The programme expansion activities at the centre are under active consideration of the Government of India. The Standards for Copper-T 200 B IUDs and Tubal Rings were finalised by the Centre and clearance was accorded by the Bureau of Standards for publication thereof in the Drugs and Cosmetics Act, 1945 and the amendments made thereto.

13.11.3 An amount of Rs. 54.00 lakh has been made available for the smooth running of the programme activities at the centre during the year 1990-91. An amount of Rs. 11.00 lakh could be released by the end of December, 1990 of the current financial year. The Government of India constituted a Committee on 26 April, 1990 to monitor and review the working of the above centre periodically and to recommend changes in the strategy of its working in the near future. The

committee's term is three years from 26.4.1990, when it was constituted by the Government of India.

### 13.12      **Surveillance      System      For Sterilisation**

13.12.1 During the year 1990-91 the Government of India in the Ministry of Health and Family Welfare, in collaboration with UNFPA, is in the process of according approval for implementation of the said project initially in the two States of Rajasthan and Tamil Nadu where the incidence of post sterilisation deaths and complications etc., are above the normal incidence in the rest of the country. The project is being financially supported fully by UNFPA with a total contribution of US \$ 2,56,962 for three years from January, 1990. The said State Governments are very much willing to implement the said project soon on receipt of approval from the Government of India.

13.12.2 The project activities will be undertaken initially in four districts (2 districts each in Rajasthan and Tamil Nadu) with the objectives of reducing the morbidity and mortality associated with sterilisation and to develop a surveillance system so that the project activities may be extended to other parts of the country in order to ensure quality assurance in the National Family Welfare Programme. The necessary staff support and vehicles etc., have been provided under the project activities.

13.12.3 An amount of Rs. 21.00 lakh has been made available for implementation of the project activities in the said two States during 1990-91. The scheme will continue functioning during the 8th Five Year Plan (1990-95).

### 13.13      **Indian      Medical      Association, New Delhi**

13.13.1 The Indian Medical Association with its headquarters in New Delhi has been functioning for the last over 61 years



through a network of 1200 branches with a total membership of over 75,000 doctors throughout the country. It is one of the largest voluntary organisations working in the field of public health, medical education and for the propagation of family welfare programmes through its local branches in States/Union Territories. The Government of India have been involving the Indian Medical Association in the implementation of the family welfare programme by way of giving grants to them on year to year basis. During the year 1990-91, an amount of Rs. 10.00 lakh has been made available for giving grants to I.M.A. for holding seminars/workshops on family welfare programme and its inter-connected activities. Similarly an amount of Rs. 10.00 lakh for supplying commodity assistance in the form of laparoscopes besides supplying Copper-T (200B, IUDs), Nirodh (Condoms), and Oral Pills etc. An amount of Rs. 3.50 lakh was released in December, 1990 to I.M.A. for holding 100 seminars at different branches of I.M.A. in the country for boosting up of spacing methods among young women under National Family Welfare Programme.

13.13.2 In brief, the I.M.A. is entrusted with the following activities in the field of family welfare/population control programme in collaboration with the Ministry of Health and Family Welfare :

- 1) Training of I.M.A. doctors in laparoscopic sterilisation techniques in the Central Laparoscopic Training Centres functioning at the selected medical colleges/institutions in the States/UTs.
- 2) Supply of laparoscopes to I.M.A. doctors after training in laparoscopic sterilisation techniques with 50% reduction in the original cost of the equipment.
- 3) Holding workshops/seminars on family welfare programme particularly to boost up the spacing

methods under the National F.W. Programme.

- 4) A small family welfare cell has been functioning at I.M.A. headquarters in New Delhi w.e.f. 1st June, 1989 for dissemination of information on family welfare and its policy as approved by the Ministry of Health and Family Welfare.

13.13.3 A total of 139 teams from I.M.A. in laparoscopic sterilisation techniques have so far been trained since the inception of the training programme. Altogether 28 KLI laparoscopes (single puncture) have so far been supplied to I.M.A. for onward supply to the concerned doctors, who were trained in laparoscopic sterilisation techniques by the central laparoscopic training centres.

#### 13.14. Quality Control and Assurance in Family Welfare Programme

13.14.1 With a view to ensure quality assurance to the acceptors of family planning methods and also to introduce standards for equipments/instruments and other family welfare articles/devices in the National Family Welfare Programme for reducing the level of complications/mortality and failures in the after-sterilisation operations, The Government of India constituted an "Expert Committee on Technical Matters" in the Ministry in September, 1990 keeping the following objectives in view :

- i) To consider and advise the Government of India in all matters including administrative, organisational and technical connected with the implementation of the National Family Welfare Programme with particular reference to IUDs, sterilisation procedures, MTPs, Oral contraceptives and any other method of contraception;
- ii) To review the efficacy and effectiveness of the working of various



tubal rings, IUDs, MTP Suction Aspirators, and different brands of laparoscopes laparocators etc., for use under National Family Welfare Programme;

- iii) To advise on the various aspects of the quality control of tubal rings, IUDs, MTP Suction Aspirators and Laparoscopes to be used under National Family Welfare Programme;
- iv) To Suggest modifications in the specifications and standards of the testing of IUDs/tubal rings etc., being developed at I.I.T., Hauz Khas, New Delhi;
- v) (i) To lay down the minimum standards for laparoscopes/laparocators.
- v (ii) To review the existing standards and specifications laid down under 7080 (Part I and II) for MTP Suction Aspirators and suggest changes, if required;
- v) (iii) To standardise the specifications for MTP Suction Aspirators; and
- vi) To discuss any other item of importance in the field of contraceptive technology.

13.14.2 The leading gynaecologists and public health specialists/experts and other senior officers working in the Government of India institutions and in the Ministry itself are the members of the above committee. The term of the committee is three years w.e.f. 21.9.90, when it was constituted by the Government of India. Since the constitution of the above committee, three meetings were held under the Chairmanship of the Director General of Health Services in August, 1990, October, 1990 and January, 1991. A number of items viz. Introduction of oral pill contraceptive (Mala D); Centchroman, the weekly oral pill contraceptive; Norplant Six; Net-e-en Injectables, Vaginal Rings, Standards Tubal rings; MTP Suction aspirators; and Manufacturing of Copper-T 200 B IUDs were discussed exhaustively and planned up for necessary action in the Ministry.

13.14.3 *Monitoring and Analysis of Post-Sterilisation Deaths/ Complications* : The Technical Operations Division in the Ministry of Health and Family Welfare have been monitoring and evaluating the reports of death due to sterilisation in States/UTs on quarterly basis. The post-sterilisation deaths are being reported by States/UTs to this Ministry in the prescribed proformae by techniques/or methods of sterilisation operation viz. laparoscopic, traditional tubectomy mini-laparotomy, interval, and post partum sterilisation and the same are compiled at national level. The recorded number of post-sterilisation deaths in the country during the years 1985-86 to 1989-90 were as given below :

Years	Total Sterilisation operations done	Post-sterilisation deaths recorded	Death rate per lakh of sterilisations done
1985-86	48,74,614	485	9.9
1986-87	53,63,720	447	8.3
1987-88	49,40,804	398	8.1
1988-89	41,33,551	363	8.8
1989-90	29,75,337	237	8.0

(Figures are provisional.)

13.14.4 It may be observed that death rate due to sterilisation operations has constantly been decreasing on year to year basis from 9.9 deaths per lakh of sterilisation operations in 1985-86 to 8.0 in 1989-90. It may perhaps be due to constant monitoring of post-sterilisation deaths and investigations thereof by the Quality Assurance Committees, which have since been constituted at State/UT levels and also at district levels throughout the country. The supply of standards equipments/instruments viz., KLI laparoscopes/laparocators, and Karl Storz Laparoscopes, KLI tubal rings, to States/UTs and training of doctors in standards sterilisation for male and female working



at service centres etc. may be the other possible reasons for occurrence of low mortality after sterilisation operations.

13.14.5 This Ministry have since printed 5000 copies of standards sterilisation for male and female and the same were under issue to States/UTs for further supply to all PHCs, Community Health Centres, Post-Partum Centres at district/sub-district level hospitals and other service centres etc., for adoption/follow up of instructions rigidly by the operating surgeons/gynaecologists at the time of undertaking sterilisation operation at service centres and camp sites.

13.14.6 A System of reporting in the prescribed proforma is being developed at service centres/medical institutions in States/UTs for reporting of post-sterilisation deaths and deaths occurring after IUD insertions directly to the Government of India, Ministry of Health and Family Welfare with a copy to the concerned State Director of Health Services and F.W. This system would help to have preliminary information on cause (s) of death after sterilisation operations and IUD insertions for consideration and necessary action in the Ministry. Thereafter the service centres/medical institutions in States/UTs are also required to furnish a detailed enquiry report into the causes of death occurred due to sterilisation/IUD insertion in the prescribed proforma to the concerned State Director of Health Services and F.W., who may be sending this enquiry report with necessary comments to the Ministry of Health & F.W. within three months after the occurrence of such deaths for necessary analysis and advice to States/UTs for preventing deaths and complications arisen due to sterilisation and IUD insertion. This system of monitoring and evaluating would go a long way to ensure quality assurance in the National Family Welfare Programme. Broadly the following causes of complications lead to death after

sterilisation which need be avoided :— Septicaemia, Peritonitis, Paralytic ileus; surgical shocks; Anaphylactic/Neurogenic shock; Cardiac-Embolism; Tetanus infection; Meningitis and Encephalitis; Injury to the bowel and arteries; Cardio-respiratory arrest and Hyperpyrexia.

13.14.7 The above causes of deaths after sterilisation have been conveyed to States/UTs for their guidance and necessary precautions to be taken by the operating surgeons/gynaecologists so that the mortality and complications after sterilisation could be wiped out completely from sterilisation programme.

13.14.8 *Failure of Sterilisation Operations* : It is a common complaint from the acceptors of sterilisation, particularly from women acceptors, that they had pregnancy after sterilisation operations. A few of the women acceptors have also been going to courts to have suitable compensation from States/UT Governments in lieu of failure of sterilisation operation under National Family Welfare Programme. The Central Government has been analysing the factors responsible for failure of sterilisation. Some of the reasons identified for this failure are :

1. Lack of training of doctors in sterilisation operation;
2. Use of sub-standard tubal rings;
3. Some anomaly with the body structure of men & women; and
4. Physiological/natural anastomosis between the cut ends of tubes/vas, after sterilisation.

13.14.9 In the country, 19,71,152 sterilisations were done during 1988-89 whereas 772 conceptions were reported. However, as against 13,28,825 sterilisations done during 1989-90 in the country, 167 conceptions were reported in this period.



### 13.15 Special Schemes

13.15.1 Special Schemes Section in the Department of Family Welfare is implementing the following special schemes which are as follows :

- i) All India Hospitals Post-Partum Programme at District level hospitals including PAP Smear Test facility programme in Medical Colleges.
- ii) All India Hospitals Post-Partum Programme in Sub-Divisional level Hospitals.
- iii) Sterilisation Beds Scheme.
- iv) Re-organisation of service delivery out-reach system in urban slum areas—Urban Revamping Scheme.

13.15.2 *All India Hospitals P.P. Programme at District level Hospitals*: The Post Partum Programme, a maternity centred hospital-based approach to F.W. Programme covers 554 District level medical institutions which includes 104 Medical Colleges, 2 Post-graduate institutions and 448 leading hospitals in various parts of the country. 43 Voluntary Organisations are also participating under the programme.

13.15.2 (i) All the Institutions implementing the programme have been provided with a set pattern of inputs in the form of staff and equipment including at least a 10-bedded sterilisation ward and operation theatre. The staff and equipment provided at the centres differ from Institute to Institute as the Post-Partum Institutions have been classified into 3 types i.e. A, B and C depending upon the work load of Obstetrics and Abortion cases. The programme is 100% Centrally aided.

13.15.2 (ii) The Post-Partum Programme promotes all methods of contraception. During the year 1989-90, 13.63 lakh obstetric and abortion cases were attended to as against 12.71 lakh during the year 1988-89. In all, about 10.08 lakh acceptors of various family planning methods were

enrolled during the year 1989-90 as against 8.20 lakh during the year 1988-89.

13.15.2 (iii) *Performance*: 454 P.P. Centres have submitted the performance reports out of 554 institutions implementing P.P. Programme during the year 1989-90, as against 444 institutions during 1988-89. The performance of various acceptors of family planning methods during the year 1989-90 is detailed below :—

F.W. Methods	1989-90	%
i) Tubectomy	4,03,187	39.96
ii) Vasectomy	19,988	1.98
iii) I.U.D.	2,76,576	27.41
iv) O.P. Users	91,292	9.05
v) Eq.C.C. Users	2,17,867	21.60
Total Acceptors	10,08,910	100.00

13.15.3 *All India Hospitals P.P. Programme at Sub-District/Taluka level Hospitals*: The purpose of extension of the P.P. Programme to Sub-district/Taluka level hospitals is to provide MCH and Family Welfare services in rural and semi-urban areas. Initially, the Post-Partum Programme was extended to 50 Sub-district hospitals. By the end of the 6th Plan, the programme was extended to 400 Sub-district level hospitals. The programme has further been extended in a phased manner during the 7th Plan period. In all, 1075 sub-district hospitals have been approved by Government of India upto 1989-90 and 968 sub-district level hospitals have been sanctioned by various State Governments as per details given below :—

No. of Sub-district Hospitals approved				
Year/Plan	From those already Strengthened under erstwhile British Aid Scheme.	Other than those under British Aid Scheme.	Total	Sanctioned by State Govts.
1	2	3	4	5
Up to 6th Plan (1984-85)	253	147	400	396
1985-86	72	228	300	296



1	2	3	4	5
1986-87	—	129	129	119
1987-88	—	121	121	102
1988-89	—	125	125	55
1989-90	—	—	—	—
Total	325	750	1075	968

13.15.3 (i) The Government of India, have provided a 6-bedded sterilisation ward, operation theatre, staff and equipment for each Institute for implementation of the programme with 100% Central assistance.

13.15.3 (ii) During the year 1989-90, information has been received from 544 Sub-div. hospitals as against 461 during 1988-89. In all, 5,68,151 acceptors of various methods were enrolled during 1989-90 as against 4,30,888 during 1988-89. Thus, the achievement per P.P. Centre shows an increase of 11.8%.

13.15.4 *Post-Partum PAP Smear Test Facility Programme*: The Post-Partum PAP Smear test facility programme for early detection of cervical cancer among women acceptors and non-acceptors of various family welfare methods has to be provided to all the teaching Medical Institutions. Upto the end of 1989-90, the programme has been approved in 105 Medical Institutions of the country of which 15 Institutions have been approved during 1989-90. The progress of the work done under the programme by the reporting medical Institutions is given in the Statement at the end of para 13.15.7 (iii) on page 179.

13.15.5 *Maternal and Child Health Supplemental Programme*: Under the P.P. Programme, Maternal, Child Health and Family Welfare Services are provided, so as to improve the health of the mothers and the children. Ante-natal and Post-

natal services are being provided as detailed below :

- i) Ante-natal and Post-natal care including prevention against anaemia by Multi-Vitamin Therapy and protection against tetanus through regular immunisation programme.
- ii) The children are immunised against Diphtheria, Tetanus, Whooping Cough with regular immunisation schedule. Prophylaxis against anaemia and night blindness is achieved through regular administration of Iron and Folic Acid preparation and Vitamin-A concentrate.

13.15.6 *Sterilisation Beds Scheme*: This scheme provides for immediate facilities for tubectomy operations in the hospitals where such cases could not be admitted due to lack of facilities. Under the scheme, beds are sanctioned to those Medical Institutions/Hospitals which are run by the Voluntary Organisations on the basis of their performance during the previous year. Beds are sanctioned to the Voluntary Organisations on the recommendations of the State Governments and Regional Directors of Health and Family Welfare of the respective States. The beds so reserved are provided annual maintenance grant. The provision in the maintenance charges for sterilisation beds are subject to the following conditions :—

- a) A sum of Rs. 3,000/- per bed per annum would be admissible as maintenance grant to Government Hospitals on achievement of minimum of 75 tubectomies. Local Bodies and Voluntary Organisations would receive the maintenance grant of Rs. 3,000/- per bed per annum on achievement of minimum of 60 tubectomies.
- b) In case, the Government/Local Bodies and Voluntary Organisations



fail to achieve the minimum target of 75 and 60 tubectomies per bed per annum respectively, then the maintenance charges would be admissible @ Rs. 2,400/- subject to minimum performance of 45 tubectomies per bed per annum.

- c) If the performance of all types of Institutions, Government/Local Bodies/Voluntary Organisations is less than 45 tubectomies per bed per annum, proportionate grant would be admissible.
- d) If a Voluntary Organisation/Local Body Institution has received construction grant for sterilisation beds and the level of performance of that Institute is below the minimum target of 45 tubectomies per bed per annum, no maintenance charges would be admissible.

13.15.6(i) In all, 3,611 sterilisation beds have been approved by Government of India upto 31st March, 1990, of which 1,130 beds are functioning under Government and Local Body Institutions and 2,481 beds under Voluntary Organisations.

13.15.7 *Re-organisation of service delivery (Out-reach system in Urban slums — Urban Revamping) Scheme* : A Working group on re-organisation of Family Welfare and Primary Health Care service was constituted by Government of India to give their recommendations for additional requirements for improving the out-reach services in urban slums. The recommendations of the working group were accepted by Government of India and were sent to the various State Governments to frame the proposals and send them to this Department for consideration and approval. As per the recommendations of the Working Group, the Urban areas have been categorised into 4 types of Health posts to be established according to the population. Similarly, City FW Bureaux have also been categor-

ised into 4 types according to the population of the cities.

13.15.7(i) *Progress of Implementation of the Scheme* : The Urban Revamping Scheme was initiated at the fag end of the year 1983-84. Only 32 Health Posts could be approved in the State of Maharashtra and UTs of Delhi and Chandigarh. Thereafter, the Scheme gained momentum and in subsequent years and upto the end of 1989-90, the administrative approval of Government of India for establishment of 936 Health Posts and 14 City F.W. Bureaux have been conveyed for the States of Haryana, Karnataka, Madhya Pradesh, Tamil Nadu, Uttar Pradesh, Rajasthan, Gujarat, Maharashtra, Orissa, Punjab, Delhi and Chandigarh. A total of 879 Health Posts and 10 City FW Bureaux have been sanctioned by various State Governments upto 31st March, 1990. 1,733 Urban F.W. Centres (old type) are also functioning in the country.

13.15.7(ii) However, it was felt that the programme is not picking up to the extent it should have been. So in order to assess the Family Welfare/Primary Health Care needs of urban population (specially slums) and formulation of suitable recommendations for their strengthening, it was considered necessary and realistic to associate with this exercise the officials responsible for providing these services. It was, therefore, decided to collect the necessary information through workshops. To start with, 102 cities with population over 2 lakh (according to 1981 census) have been taken up. Accordingly, it was planned to conduct workshops to cover 102 cities, so that proposals for strengthening the primary health care, MCH and FW services can be formulated for these cities, as a package. The NIHFW, New Delhi was assigned to conduct these workshops in various States. The Institute submitted a detailed report containing proposals of various cities for re-organisation of FW/MCH/Primary Health Care services. It was found that the proposals were not as per Government of



India's norm. So that Institute has now been requested to scale down the proposals of 83 cities as per Government of India's norm (i.e. Krishnan Committee Report). The proposals for remaining 17 cities is also to be finalised by National Institute of Health and Family Welfare, New Delhi, and these cities are likely to be covered under World Bank-assisted Project, IPP-VIII.

13.15.7(iii) Under the programme, strengthening of primary health care and family welfare services in the cities of Bombay and Madras are being assisted by World Bank under IPP-V Project. This project has been sanctioned during 1988-89 and will run for a period of seven years ending 1995. Under this project, 139 Health Posts in Bombay and 123 in Madras city have been approved.

### Statement

#### Performance during 1988-89 and 1989-90 in respect of Reporting Institutions under PAP Smear Test Facility Programme

(Ref. Para 13.15.4)

Item of information	Performance		% increase(+) decrease(-) in 1989-90 over 1988-89
	1988-89	1989-90	
1. No. of Institutions reported	25	27	(+) 8.0
2. No. of OB & AB cases reported	117016	98946	(-) 15.4
3. No. of Women from whom smear was collected	15484	17279	(+) 11.6
4. No. of slides examined	17507	19638	(+) 12.2
5. No. of slides found with abnormality	10178	11600	(+) 14.0
(i) Among users of F.W. Methods	5579	5513	(-) 1.2
(ii) Among Non-users of F.W. Methods	4599	6087	(+) 32.4
6. No. of women with infection/pre-cancerous lesions advised for treatment	5854	6190	(+) 5.7
7. No. of women under treatment	4565	5460	(+) 19.6
8. No. of women cured	2695	4333	(+) 60.8

#### 13.16 Conventional Contraceptive Programme

13.16.1 *Nirodh* It is a simple, reversible and non-chemical methods of contraception and is widely accepted by the couples in the younger age group for spacing. This is being provided through the following schemes, besides open market sale under the brand names by the manufacturing companies at a price which the market can bear :—

- (a) Free Distribution Scheme
- (b) Social Marketing Scheme

13.16.2 *Free Distribution Scheme* : Under this Scheme, *Nirodh* is being made available to acceptors free of charge through Primary Health Centres and Sub-centres in rural areas and hospitals, Dispensaries and M.C.H. Centres in Urban areas.

13.16.2 (i) A quantity of about 150.00 million pieces of *Nirodh* (free supply) has been despatched by the supplying firms from April to September, 1990 to states/ U.T. Administrations, Railways and Defence Organisations.



13.16.2 (ii) Against a requisite quantity of 702.00 million pieces, based on C.C. Users targets to be distributed by States/U.T. Governments and Agencies for achieving expected annual target of 9.75 million C.C. Users for 1990-91, a quantity of 225.33 million pieces (provisional) has already been distributed from April 1990 to August, 1990, by States/U.T. Administrations and Agencies. In addition to Nirodh, other contraceptives like Jelly Cream, is also to be made available to the beneficiaries as a part of cafeteria approach, but due to the existing financial constraints, no procurement could be made during 1989-90 despite persistent demands from the States/UTs.

13.16.3 *Social Marketing Scheme* : Social Marketing Programmes for Nirodh was launched in 1968 with the help of giant consumer goods/pharmaceutical and oil companies both in public and private sectors. Under this Programme, Nirodh is being sold at a highly subsidised price through more than 3 lakh outlets of these companies. Three brands of Nirodh are being sold under the Scheme. These are (i) Normal (dry) at a price of 30 paise per pack of 3 pcs; (ii) Lubricated under the brand name Deluxe at a price of Rs.1/- for a pack of 5 pcs; and (iii) Thinner, coloured and lubricated variety 'Super Deluxe' at a price of Rs. 2/-for 4 pcs.

13.16.3 (i) During 1987-88, Parivar Sewa Sanstha, a Voluntary Organisation working in the field of Health and Family Welfare took up marketing of condoms in Haryana with brand name 'Sawan' under this programme. During 1988-89, Sanstha started marketing of Super Deluxe variety of condoms with brand name 'Bliss' in Haryana. Their operation was subsequently extended to Delhi, Punjab and Himachal Pradesh. Further, during 1988-89, Population Services International, a Society registered under the Societies Registration Act took up Social Marketing of Nirodh in the States of Punjab, Haryana, Himachal Pradesh, J&K and Union Territory of Chandigarh which was subse-

quently extended to Rajasthan also. They are also marketing Nirodh under their own brand name 'Masti' in U.P. and Delhi. During the current year, the distributing companies have been permitted to market their own brands in the areas of their choice anywhere in the country.

13.16.3(ii) In 1985, the Social Marketing Programme was reviewed and since then, the companies are selling Nirodh as one of their own products. Nirodh publicity campaign through T.V., A.I.R. and Cinema is being carried out by DAVP. Other publicity such as putting up hoardings, wall paintings, printing of sale materials, advertisements through local press, arranging displays, participation in melas etc., is being carried out by the companies. For this activity, government is providing assistance at the rate of 3 paise per piece sold since 1st August, 1985 and the marketing companies are contributing 1 paise per piece sold as their contribution to the national endeavour. Further, the progress of the programme was evaluated by regular surveys by Operation Research Group, Baroda from time to time.

13.16.3 (iii) During 1989-90, the ever highest sale of 296.98 million pcs. was achieved against a target of 310 million pcs; the sale was higher by 25.5% compared to the previous year.

13.16.3(iv) Apart from social marketing, Condoms are also being sold through commercial channels by manufacturing companies under their own brand names at price which the market can bear.

13.16.3(v) During 1989-90 about 65.65 million pcs. were sold by them against 67.26 million pcs. during 1988-89.

13.16.4 *Oral Pills* : The Oral Pills under the brand name 'Mala-N' are being made available under free distribution scheme in States/UTs through the Primary Health Centres and Sub-centres in rural areas and urban hospitals and Post-Partum Centres in urban areas. The distribu-



tion of Oral Pills has been authorised through para-medical staff like PHNs, Graduate Nurses and ANMs under certain conditions. The raw material for tableting Oral Pill is being received as commodity assistance from UNFPA. During 1989-90 total of 22.07 million cycles of 'Mala-N' were distributed under the free distribution scheme.

**13.16.4(i) Social Marketing of Oral Pills :** After achieving a grand success in Social Marketing of Nirodh, one more dimension was added to S.M.P. A programme of Social Marketing of Oral Pill was launched in November, 1987 after series of meetings with the Pharmaceutical companies. Four Pharmaceutical companies were involved in the Programme on regional basis. The brand name of the pill under the social marketing is 'Mala-D' to distinguish it from 'Mala-N' being supplied under Free Distribution Scheme. The oral contraceptive 'Mala-D' is being made available to consumers at the rate of Rs. 2/- per cycle of 28 tablets, 21 of oral pills and 7 of ferrous fumerate tablets. The product has been treated as 'ethical' one and is being sold only on the prescription of a Registered Medical Practitioner. For creating awareness amongst the prospective users, a systematic advertisement campaign through various media is being carried out through DAVP. Besides this, Parivar Sewa Sanstha took-up the Social Marketing of Oral Pills in Haryana under the brand name 'ECROZ'

**13.16.4(ii)** In 1989-90, a total of 45.67 lakh cycles were sold whereas 28.69 lakh cycles were sold during 1988-89. The target for 1989-90 was 65 lakh cycles.

**13.16.4(iii)** The raw material for tableting of 'MALA-D' is being received as commodity assistance from UNFPA.

**13.16.4 (iv)** In addition to Social Marketing Programme, Oral Pills under various brand names are being sold by the Pharmaceutical companies. During 1989-90, 88.50 lakh cycles were sold by the com-

panies as against 92.40 lakh cycle during 1988-89.

**13.16.5 Laparoscopes:** For laparoscopic sterilization Laparoscopes/Laparocators are being made available to all the States/ UTs by the Ministry. The procurement is made from foreign manufacturers through DGS & D and UNFPA is also providing funds/supplies for the purpose.

**13.16.5 (i)** During 1989-90, total of 1340 laparoscopes/laparocators were purchased under the Programme.

### **13.17 Oral Pill Scheme**

**13.17.1** The Scheme of Social Marketing of Oral Pills was launched on the 28th Nov. 1987. The brand name Mala-D has been given to the product under Social Marketing Programme. The product is manufactured by M/s Indian Drugs & Pharmaceuticals Ltd., Delhi and Hyderabad and M/s Eupharma Laboratories, Bombay. It is marketed by four pharmaceutical companies viz M/s Hoechst India Ltd., M/s Rallis India Ltd., M/s Warner Hindustan Ltd., and M/s Dey's Medical Stores (Mfg.) Ltd. respectively on Northern, Western, Southern and Eastern regional basis. The raw material for manufacture of Mala-D is received as commodity assistance from UNFPA and supplied free to the Marketing companies. Presently, Mala-D being treated as an ethical drug is sold on the prescription of Registered Medical Practitioners at a subsidised price of Rs. 2/- per cycle. Each cycle consists of 28 tablets (21 of Oral Pills and 7 of Placebo). Action has been initiated to make Mala-D an Over the Counter product, so that it becomes available to consumers without doctor's prescription. This is being done to boost up its use.

**13.17.2** Systematic advertising campaign has been launched through various media with the help of DAVP to create awareness amongst masses about uses of Oral



Contraceptive Pills. Seminars are also organised in different parts of the country to promote usage of Mala-D and remove misgivings about side-effects of the product. During 1989-90, five seminars were held at Bhopal, Jaipur, Guwahati, Patna and Bhubaneshwar to promote usage of Mala-D. During 1990-91, so far, three seminars have been held at Pondicherry, Ahmedabad and Imphal.

13.17.3 The sale of Mala-D from the year of its launching (1987-88) upto now is indicated below:

Year	No. of Cycles
1987-88	— 7.23 lakh cycles (Nov. 87—Mar. 88)
1988-89	— 28.69 lakh cycles
1989-90	— 45.67 lakh cycles
1990-91	— 27.14 lakh cycles (upto Sept. 90)

13.17.4 A target of 90 lakh cycles has been fixed for the year 90-91. The budget provision for the Oral Pill Scheme is given below:

PLAN BUDGET

B.E. (89-90)	R.E. (89-90)	B.E. (90-91)
Rs. 100 lakh	Rs. 95 lakh	Rs. 100 lakh

13.18 Legislation on Sex Determination Tests of the Foetus

13.18.1 The abuse of the pre-natal tests for sex determination and female foeticide has been engaging the attention of the Govt. of India for a considerable time. Accordingly, the Govt. of India has constantly been working on bringing out a

regulatory measure to check this menace. The sex determination test for female foeticide has provoked many social forums to urge the Govt. of India to undertake urgent legislative and other measures to check this menace/evil practice.

13.18.2 It has been brought to the notice of the Govt. of India that many clinics are functioning at Bombay, Delhi, Amritsar, etc., and in different pockets of the country, which are engaged in sex determination tests of the unborn child. The Govt. of India have given serious consideration to the above proposal of controlling this evil practice and are of the view that determination of sex of the foetus and female infanticide is discriminatory against women. If this practice is allowed to continue unchecked, it may even result in the decline of female population in the country.

13.18.3 The Govt. of India convened a conference in December, 1986, wherein medical experts, administrators and other representatives of the social forums and Women's Organisations participated in a free and frank discussion. A resolution was adopted in this conference that the pre-natal diagnostic tests should be regulated by the Govt. of India and any advertisement on these tests should be prohibited and a public awareness be generated against these tests. Accepting the resolution, the Govt. of India subsequently constituted a Small Committee under the Chairmanship of the Health Secretary to the Govt. of Maharashtra with seven other members to consider the question further and to recommend the feasibility of enacting a comprehensive legislation to give effect to the above resolution and other recommendations.

13.18.4 The Committee after considerable deliberations have submitted a report to the Govt. of India suggesting a comprehensive legislation and a Draft Central Model Bill. This draft bill was sent to State Governments inviting their comments and the majority of them welcomed



the proposal to bring forth a legislation by the Govt. of India in this matter.

13.18.5 The State Govt. of Maharashtra has already undertaken a legislation in this field as "The Maharashtra Regulation of use of Pre-natal Diagnostic Technique Act, 1988". Barring the Maharashtra legislation, there is no other legislation enacted by any other State Government in the country so far.

13.18.6 As the abuse of sex determination tests of the foetus and female foeticide is being reported from many pockets of the country, it is considered necessary that the Parliament may enact a comprehensive legislation for the sake of uniformity throughout the country. The Min. of Law & Justice was consulted specifically on the point as to whether Parliament is

competent to enact a legislation and the said Ministry have since advised that Parliament is competent to enact a law and the proposed legislation would fall under entry I of the Concurrent List of the Seventh Schedule to the Constitution viz. "Criminal law including all matters included in the Indian Penal Code at the commencement of the Constitution". The Parliament has enacted the Medical Termination of Pregnancy Act, 1971 and similarly Parliament is competent to enact the proposed law on the lines indicated above.

13.18.7 Draft note for Cabinet has already been approved by the Ministry of Law & Justice and it has since been sent to Cabinet Secretariat for directions in the matter after approval from the Union Minister for Health and Family Welfare.



## MATERNAL AND CHILD HEALTH PROGRAMME



**T**hough pregnancy and child birth are natural physiological phenomenon, women have to undergo stress and strain and as such need special care particularly in case of repeated pregnancies with short birth intervals. Similarly, childhood is the growing period and infants and children also need special care. The maternal and child health services are, therefore, provided as a part of total health care to the community through the existing health infrastructure in rural and urban areas. The health infrastructure is gradually being expanded to reach the population as near to the door-steps as possible. Further, Ministry has sponsored immunization schemes for infants and children and mothers against common vaccine preventable diseases, and prophylaxis schemes against various deficiencies. Which are being carried out throughout the country.

### 14.2 Prophylaxis against nutritional anaemia among mothers and children

14.2.1 Anaemia is one of the important causes of morbidity and mortality among mothers and children. Under the scheme of prophylaxis against nutritional anaemia, pregnant and nursing mothers, acceptors of family planning and children 1-5 years are given daily dose of iron and folic acid for a period of 100 days as a prophylactic measure.

### 14.3 Prophylaxis against blindness due to Vitamin 'A' deficiency among children

14.3.1 Severe form of Vitamin 'A' deficiency associated with mal-nutrition and infection may cause blindness among children. It has been found that children



between 1-5 years show signs of Vitamin 'A' deficiency in many parts of the country. 2 lakh international unit of Vitamin 'A' is given to children of this age group every 6 months as a preventive measure.

**Targets and Achievements in Prophylactic Services upto July, 1990 and financial outlays**

(Figures in lakhs)

Scheme	Target	1990-91	Achieve-	% age
	Finan- cial:	Physical	ment upto July, 1990 Physical during	achieve- ment of Annual target during 1990-91
Prophylaxis against nutritional anaemia among Mothers	830.00	205.757	41.66	20.4
Children		350.00	41.88	12.0
Prophylaxis against blindness among children due to Vitamin 'A' deficiency.		300	72.85 doses	13.6

**14.4 Supply of drugs and vaccines**

14.4.1 The Department of Family Welfare procures all vaccines. Iron and Folic Tablets and Vitamin 'A' solution are supplied to the State Governments and U.Ts as per their requirement. The expenditure incurred on these items is debited to the accounts of the States at the close of the financial year.

**14.5 Regional Institute of Maternal and Child Health**

14.5.1 It has been envisaged to develop Regional Institute of Maternal and Child Health Centres in States where Infant Mortality Rate is high. During 7th Plan, Rs. 15.00 lakh have been spent for establishment of Regional Institute of Maternal and Child Health at Jodhpur, Rajasthan.

During 1990-91, Rs. 20.00 lakh have been provided for Regional Institute of Maternal and Child Health at Jodhpur, Rajasthan. During 8th Plan, there is a proposal to set up five more Regional Institutes of Maternal and Child Health in Uttar Pradesh, Madhya Pradesh, Orissa, Assam and Bihar.

**14.5 Acute Respiratory Infection Control Programme**

14.6.1 Acute respiratory infection is an important cause of mortality among children. During 1990, 15 districts in 15 States have been taken up under A.R.I. control programme. Training programmes for medical and para-medical workers are going on at present and the drug to be used (Contrimoxazole) has already been procured Centrally and supplied to the districts. Policy document on A.R.I. control has been printed and is being circulated.

**14.7 Government of India Scholarship for Women Medical and Nursing Students**

14.7.1 Under this Scheme, scholarships have been awarded to 25 Under-graduate medical students, 7 M.Sc. Nursing, 25 B.Sc. Nursing, 5 Public Health Nursing and 1 DMCW studens.

**14.8 Holiday Home in Shimla**

14.8.1 The old office of the Countess of Dufferin's Fund located at Shimla is maintained as Holiday Home for the use of doctors and nurses by paying a nominal rent to enable them to spend their leave period at the hill station for holidaying. During off season, officials of the Ministry of Health and Family Welfare also make use of the Home. The Holiday Home is under the control of the Ministry of Health and Family Welfare (Department of Family Welfare).



## 14.9 President's Medals

14.9.1 President's Silver Medals are being awarded to the best women candidates passing out in final MBBS examination and B.Sc. (Nursing) from various Universities in the country every year. President's Gold Medals are also awarded to doctors showing maximum courtesy to the patients during their internship in the Lady Hardinge Medical College, New Delhi and JIPMER, Pondicherry. The expenditure for instituting these medals is being borne at present by the Ministry of Health and Family Welfare (Department of Family Welfare). During the current year, 65 President's Silver Medals have been awarded for B.Sc. Nursing and MBBS students who passed out with highest marks from their universities in the years 1985-86 and 1986-87.

## 14.10 Management and Control of Diarrhoeal Diseases

14.10.1 Diarrhoeal diseases are a major health problem in the country specially amongst children below five years of age. Diarrhoea contributes roughly 25% of mortality in this age group. It is estimated that about 1.5 million deaths occur every year because of diarrhoea or diarrhoea related causes. On an average, a child suffers three episodes of diarrhoea per year.

14.10.2 Oral Rehydration Therapy Programme is a 100% Centrally sponsored scheme with the objective of reducing mortality amongst children below five years of age by promoting ORT. Studies reveal that 90% of the children suffering from diarrhoea can be managed successfully at home by mothers by administering home made/home available fluids at the onset of diarrhoea. Only 10% of the cases need to report to the Health facilities and only 1% out of these require intravenous fluids.

14.10.3 The thrust of the programme has been :

- (a) to educate mothers and communities to empower them to take care of the 90% of the children suffering from diarrhoea at home by home made or home available fluids; continuing feeding during diarrhoea and recognising early signs of dehydration.
- (b) Improving the case management of diarrhoeal cases at all health facilities by training of the health personnel involved in primary health care services/district hospitals and medical colleges, 15 diarrhoeal training-cum-treatment units have already been established in the medical colleges. The training is basically aimed at eliminating the use of unnecessary drugs in diarrhoea, cutting down the expenditure on Intravenous (I.V.) fluids by treating the children by ORT for 2-4 hours at the triage area at the hospital.

14.10.4 Management and control of diarrhoeal diseases is a communication challenge. Communication materials have been prepared keeping in mind the prevailing knowledge and practices in the communities in handling children with diarrhoea. For this purpose, a massive survey was undertaken in the country.

14.10.5 In order to change the existing treatment practices of overuse of drugs and I.V. fluids, training programme has received priority attention. Formal training programmes have been taken up right from the medical colleges down to the Sub-centre level in the health system and Anganwadi Workers and Village Health Guides amongst the communities.

14.10.6 ORT Programme has been taken up in a phased manner covering the specified number of districts each year. By 1989, the scheme was sanctioned in all the districts of the country. In the 7th



Five Year Plan, Rs. 16.28 crore were allocated to the States and Union Territories. However, only Rs. 8.11 crore could be released because of the non-receipt of the expenditure reports from the State Governments. The main reason for the shortfall has been due to delay in sanctioning the scheme by the State Governments and late release of Central assistance by the State Finance Departments. WHO and UNICEF assistance has also been released for training and preparation of educational materials under ORT Programme. \$15 million USAID assistance is also available on reimbursement basis on attainment of certain activities specified in the agreement. The ORT programme is a low cost intervention and has not been taken up very seriously in the country though the response has increased considerably during the last year.

14.10.7 During 1990-91, Rs. 790.00 lakh have been allocated to the States/UTs. under ORT programme.

14.10.8 *Achievements & Health Education Material Prepared:*

I. *Training: Various Categories Trained*

1. Professors of Paediatrics and Social and Preventive Medicine Trained at Kalavati Saran Hospital, New Delhi	74
2. Medical Officers trained in ORT	19,641
3. Health Supervisors trained	24,628
4. Health Workers & Health Assistants (Male and Female)	93,786
5. Anganwadi workers	59,790
6. Village Health Guides/CHGs and others	53,331
7. Para-medical and others	45,099

Indian Medical Association has been involved in the programme and they

have trained doctors outside the health system:

— Resource persons trained—	151
— Branch meetings held for training—	1,245
— No. of private practitioners trained—	30,948

II. *Establishment of Diarrhoeal Training cum-Treatment Units at the Medical Colleges:*

S.No.	State	Name of the College
1.	Assam	Guwahati Medical College and Hospital, Guwahati.
2.	Assam	Silchar Medical College, Silchar, Assam.
3.	Andhra Pradesh	Nilofer Hospital, Hyderabad.
4.	Gujarat	B.J. Medical College and Civil Hospital, Ahmedabad.
5.	Haryana	Government Medical College, Rohtak.
6.	Karnataka	JJM Medical College, Devangere, Karnataka.
7.	Maharashtra	Government Medical College, Nagpur.
8.	Madhya Pradesh	MGM Medical College, Indore.
9.	New Delhi	KSC Medical College, Cuttack.
10.	Orissa	SCB Medical College, Cuttack.
11.	Punjab	Govt. Medical College, Patiala.
12.	Rajasthan	S.N. Medical College, Jodhpur.
13.	Kerala	S.A.T. Hospital and Medical College, Trivandrum.
14.	Tamil Nadu	Madurai Medical College, Madurai.
15.	West Bengal	N.R.S. Medical College, Calcutta.

In addition to the above, funds have been released during 1990-91 for



establishment of 6 more DTUs in the following States :—

1. Indira Gandhi Medical College, Shimla, Himachal Pradesh.
2. University College of Medical Sciences, Shahdara, Delhi.
3. Andhra Medical College, Vishakhapatnam, Andhra Pradesh.
4. Regional Medical College, Imphal, Manipur.
5. Institute of Medical Sciences, Banaras Hindu University, Banaras.
6. North Bengal Medical College, Darjeeling, West Bengal.

### III. Health Education Materials Prepared:

- Training modules for doctors and Health workers.
- Audio-visual training modules, long and condensed version.
- Audio-visual training cassettes for doctors — “340 million children” (views of eminent doctors on management of diarrhoea)
- Diarrhoea, a “simple solution,” advocacy film for policy makers, politicians.
- Five short films on various aspects of diarrhoeal management for screening at movie theatres.
- Radio-Jingles.
- Set of five posters, pamphlets and a special issue of newsletters, called “Centre Calling” and *Hamara Ghar* on Diarrhoea.

### 14.11 National Immunization Mission

#### 14.11.1 Universal Immunization Pro-

gramme (UIP) was started in India in November, 1985 with the objective of achieving a coverage level of at least 85% in respect of infants and 100% in respect of pregnant women. It has been decided, however, to enhance the targets for infants to 100% from 85% w.e.f. the year 1990-91. Under this programme, pregnant women are immunized with Tetanus Toxide to protect the new borns against neo-natal tetanus. All new borns are sought to be immunized before completion of the first year of their life with BCG, DPT, Oral Polio Vaccine and Measles Vaccine. BCG vaccine provides protection against childhood tuberculosis and DPT against three diseases namely, Diphtheria, Whooping cough and Tetanus. Oral Polio Vaccine and Measles Vaccine provide protection against these diseases as the name suggests. With effect from 1990, the target for UIP has been increased to cover all infants.

14.11.2 In the beginning of 1986, this programme was named as one of the Technology Missions. Prior to 1985 also, immunization activity was implemented under Family Welfare Programme and under Expanded Programme of Immunization (EPI) but the coverage levels achieved till 1985 were only around 25 to 30 per cent. The implementation of the programme between 1978 and 1985 lacked the thrust and the support required to achieve high coverage levels within a limited time frame. UNICEF, along with some other donor agencies (Norway, Sweden, Canada, Japan and USA), have been providing funds to the extent of nearly 60 per cent of the total expenditure on this programme.

14.11.3 The objective of reaching the targetted coverage levels in respect of infants and pregnant women is planned to be achieved in all the districts of the country but the required strengthening of equipment and infrastructure has been



done in instalments or phases. The year-wise phasing of districts is as below :—

Year	No. of Districts taken up	Progressive total of Districts covered
1985-86	31	31
1986-87	64	95
1987-88	94	189
1988-89	116	305
1989-90	147	452

**14.11.4 Strategy :** An approach was sought to be formulated under which a specifically defined geographical area is expected to enhance the Immunization coverage of infants with 3 doses of DPT and OPV and one dose of BCG and measles to a level of 85% and 2 doses of Tetanus Toxide for pregnant women to a level of 100 per cent. This task was expected to be performed in selected districts each year with the Government making arrangements for inputs required in terms of personnel, supplies and equipment, vaccines training and IEC. In the first year of the 7th Plan period, 31 districts were taken up under this programme. Subsequently, there has been progressive increase and today, all the 450 districts of the country are under the Universal Immunization Programme.

**14.11.5 Operational Arrangement :** The programme is being implemented through the network of Primary Health Care infrastructure which consists of one Sub-centre for every 3 to 5 thousand rural population, a Primary Health Centre for every 20 to 30 thousand population and a referral centre called Community Health Centre, for every 80 to 120 thousand population. The Auxiliary Nurse & Midwife, popularly known as the ANM or the female multi-purpose worker, located at the Sub-centre, is the key person in the implementation of the programme. In addition, about 2,500 posts have been sanc-

tioned to strengthen supervision and monitoring of the programme at district and State levels.

**14.11.6 Vaccine Production and Supply:** DPT group of vaccine is produced in the Public Sector as well as in the Private Sector and the country has sufficient installed capacity to meet its requirement. BCG vaccine is manufactured by BCG Vaccine Laboratory, Madras, which is the only manufacturing unit in the country for this vaccine. At present, Polio vaccine is imported for use in the Programme. Polio vaccine is imported in bulk concentrate and after diluting, blending and ampouling, it is supplied by M/s HBPCCL, Bombay and M/s Radicura Pharma, Delhi to the various States. Serum Institute of India, a Private Sector Manufacturer has already started production of measles vaccine in the country and is increasing its capacity gradually to meet the total requirement of the country.

**14.11.7 Testing of Vaccines:** Statutory testing of vaccine is done by the National Quality Control Laboratory at Kasauli. All vaccines are tested before use and released only after declared standard by National Quality Control Laboratory. The vaccines received from foreign sources are released for the Programme on the basis of summary test protocols and random samples taken for testing. It has been decided to set up few more centres to be notified by the Drug Controller of India for statutory testing.

**14.11.7 (i)** The vaccine requirements are calculated on the basis of the recommended immunization schedule as also the estimated eligible population to be covered. Medical Store Depots located in Bombay, Calcutta, Madras and Karnal have also been assigned responsibilities for storage and distribution of vaccines. The distribution from supplier's premises and from the MSDs is done primarily through Indian Airlines though special vans having refrigeration arrangements are also being utilised for certain areas.



14.11.8 *Training*: Training and retraining of the field staff is an integral part of the Mission. At the national level, programme managers from the States as well as the districts are being trained. These officers in turn take up the training of the field level functionaries in the proper management of the immunization sessions. Several training materials suited to the specific needs of the immunization programme have been prepared. A task oriented manual has been published and is available in major regional languages. The training modules are based on an adaption of the WHO modules on Planning and Management of the EPI for Mid-level Managers.

14.11.8 (i) Till date, a total of 792 officers have been trained at the national level. These include 620 officers of the rank of DIPs. At State level training, the total number trained so far is 11,996 medical officers, 79,029 male/female multi-purpose workers and 70,701 other para-medical workers. Apart from this, 10 officers from Ministry, Medical Store Depots and State EPI Officers dealing with the Universal Immunization Programme were nominated for various training courses at Management Sciences for Health at Boston during 1990.

14.11.8 (ii) *Training For REF Technicians*: Cold chain system is one of the most crucial components of the programme as its effective functioning will ensure the potency of the vaccines stored. In order to remedy the faults in the ILRs, Freezers, WIC etc., the Refrigeration Technicians are imparted training at:

- (a) State Health Transport Organisation, Pune.
- (b) HER Division, SHTEMO, Guwahati.
- (c) HER Unit, Hyderabad.

14.11.8(iii) So far, 314 trainees have been trained in Refrigerator Repair Training Course, 158 trainees have been trained in WIC Repair Training Course and 13

trainees have been trained in Voltage Stabilizers Repair Training Course.

14.11.9 *Equipment and Supplies*: Overall supplies made during the 7th Plan period in respect of major items are given below:

#### Cold Chain Supplies During 7th Plan

Item	Units Supplied
Walk in Coolers	104
I.L.R. 240 Ltr.	2,873
I.L.R. 300 Ltr.	302
Ch. Freezer 300 Ltr.	1,590
Ch. Freezer 140 Ltr.	8,728
Ch. Ref. 140 Ltr.	8,986
Cold Box 22 Ltr.	9,683
Cold Box 5 Ltr.	19,120
Vaccine Carriers	1,44,235
Auto Claves	10,524
Sterlizing Drums	22,205
Steam Sterlizers	1,01,580
Storage Thermometers	24,865
Jeeps and Vans	1,365

14.11.9 (i) During the year 1990-91, the cold chain equipment being supplied are 289 Ice Lined Refrigerators (300 Ltrs.), 208 Chest Freezers (300 Ltrs.), 294 Cold Boxes (22 Ltrs.), 13,257 Vaccine Carriers, 11,05,225 Sterlizer Drums, 497 Voltage Stabilizers and 1,94,260 Spare Ice Packs.

14.11.9 (ii) The details of needles and syringes being supplied are as follows:

2 ml. Syringes	32,19,560 Nos.
1 ml. Syringes	10,95,330 Nos.
5 ml. Syringes	5,90,970 Nos.
23 g needles	10,93,564 Boxes
26 g needles	4,45,309 Boxes
20 g needles	1,10,491 Boxes



14.11.10 *Maintenance of Cold Chain Equipment:* All the cold chain equipment supplied under the U.I.P. were under service warranty. After the expiry of the warranty period, the State Governments have been requested to take over the maintenance on their own.

14.11.10 (i) The State Governments have been requested to make necessary arrangements to take over the maintenance on their own either by executing a contract with a private agency or through the HER Unit, with effect from 1st April, 1990. Necessary spares will be supplied to the States after the taking over.

14.11.10 (ii) So far, the States of Andhra Pradesh, Assam, Orissa, Maharashtra, Mizoram and U.T. of Chandigarh have taken over the maintenance. The remaining States will be taking over soon.

14.11.11 *Alternative Sources of Energy for Cold Chain System:* A highly reliable cold chain system is very essential for the delivery of safe and potent vaccine to the end users. With the erratic power supply prevailing in most parts of the country, it was considered necessary to rely on solar energy. The Central Electronics Limited (A Government of India Enterprise) Shahibabad, U.P. has been developing Solar Photovoltaic Power packs to energise refrigerators. It was decided to encourage such ventures.

14.11.11 (i) The Ministry of Health and Family Welfare sanctioned a sum of Rs. 15.00 lakh towards setting up ten SPV systems to be installed by Central Electronics Limited in Uttar Pradesh.

14.11.11 (ii) The following locations were selected by the Government of Uttar Pradesh for setting up the SPV systems:

1	2	3
1. PHC, Ailliyas (Sitapur Distt.)		2 units
2. PHC, Persandi (Sitapur Distt.)		2 units
3. PHC, Jatabaroli (Barabanki Distt.)		1 units

1	2	3
4. PHC, Jasoha (Unnao Distt.)		1 units
5. Directorate of FW, HQ, Lucknow		2 units
6. Agra		2 units

14.11.11 (iii) The SPV system generates DC electricity directly from the sunlight. The system mainly consists of SPV panel/array, battery bank and electronic control unit.

14.11.11 (iv) PHCs need energy not only for refrigerators but also for sterilization, lighting, for treating low-birth babies in warm chambers and for running audio-visual equipment.

14.11.11 (v) The functioning of these installations is being watched closely with a view to improve the system suitable for application in the areas where there is no electricity or with erratic supply of electricity.

14.11.12 *Coverage Levels Reached, 1989-90:* The following table shows the antigen-wise estimated coverage levels at the various stages of the programme:—

Antigen	Estimated Coverage Levels		
	1985-86	1988-89	1989-90
DPT	41.12%	79.61%	82.82%
OPV	35.66%	74.83%	82.30%
BCG	28.84%	79.29%	89.04%
Measles		55.17%	69.32%
TT (PW)	39.85%	65.15%	69.21%

14.11.13 *Performance:* The performance reports received from the States and Districts indicate that during the year 1989-90 the achievement has been significantly higher than previous years. The Statewise estimated coverage levels for the year 1989-90 are given at page 192 The State-wise UIP performance in absolute terms and percentage of annual targets for the current year i.e. April-March, 1991 is given at page 193.



# Estimated Coverage Levels 1989-90 in Percentage

(Ref. Para 14.11.13)

State	DPT (3)	OPV (3)	BCG	MEASLES	TT (PW)
Larger States:					
Andhra Pradesh	73	73	89	63	74
Assam	38	37	44	24	26
Bihar	70	68	79	59	46
Gujarat	99	103	104	90	93
Haryana	104	104	119	88	79
Karnataka	83	83	97	97	86
Kerala	106	110	116	88	105
Madhya Pradesh	89	88	96	77	64
Maharashtra	96	97	110	88	86
Orissa	89	88	94	58	78
Punjab	109	109	128	101	98
Rajasthan	72	72	73	71	67
Tamil Nadu	92	93	99	91	89
Uttar Pradesh	91	89	83	73	70
West Bengal	75	77	81	47	59
Smaller States:					
H.P.	86	87	98	78	66
J & K	63	50	62	36	20
Manipur	90	50	62	36	20
Meghalaya	62	64	81	21	52
Nagaland	28	25	21	13	30
Sikkim	64	60	69	45	36
Tripura	31	30	49	20	20
A & N Island	90	91	92	82	116
Arunachal Pradesh	62	63	72	41	36
Chandigarh	74	75	102	47	83
D & N Haveli	88	88	109	83	63
Delhi	74	73	105	65	66
Goa	82	85	96	63	48
Daman & Diu	120	114	92	73	58
L' Dweep	109	103	77	116	79
Mizoram	78	79	86	59	72
Pondicherry	121	122	196	109	104
All India	82	82	89	69	69



**1990-91: Achievement Under Universal Immunisation Programme**  
(From April, 1990 to March 1991)

(Ref. Para 14.11.13)

STATE	ACHIEVEMENT: as % age of annual target					ACHIEVEMENT: absolute values				
	DPT	OPV	BCG	MSL	TT(PW)	DPT	OPV	BCG	MSL	TT(PW)
Larger States:						(3RD DOSE)			(2ND+B)	
Andhra Pradesh	120.94	120.98	125.69	108.06	103.97	1628194	1628743	1692188	1454817	4798919
Assam	84.96	85.18	95.58	76.79	48.23	635072	637440	715288	574645	406363
Bihar	92.84	91.41	81.19	80.85	52.61	2535603	2496750	2217399	2208284	1682129
Gujarat	104.04	105.32	106.19	101.03	97.81	1051000	1063900	1072700	1020500	1077500
Haryana	103.83	104.20	116.80	88.88	84.08	449416	451011	505562	384704	392678
Karnataka	87.39	95.88	101.94	82.61	90.51	1050141	1152211	1225048	992704	1174829
Kerala	100.80	103.73	112.19	82.47	101.22	586484	603545	652738	479813	631371
Madhya Pradesh	95.58	97.20	106.58	95.47	75.62	1754242	1783970	1956128	1752339	1633272
Maharashtra	111.84	116.99	116.16	101.11	90.74	1873842	1960192	1946212	1694152	1625322
Orissa	93.58	93.52	103.90	87.67	81.91	743104	742631	825063	696226	737204
Punjab	120.25	120.59	118.75	109.68	101.11	516823	518280	510383	471403	464543
Rajasthan	91.89	92.10	91.13	85.52	76.20	1362257	1365454	1350981	1267851	1258536
T.N.	105.04	106.13	106.80	181.37	96.27	1257682	1270716	1278725	1213724	1282887
U.P.	101.34	98.23	96.80	90.91	77.03	4469000	4332000	4269000	4009000	3885000
W.B.	84.81	87.49	100.87	69.17	65.15	1371671	1414968	1631293	1118733	1145643
Smaller States:										
H.P.	84.61	84.66	97.48	97.48	72.25	1121153	112229	129219	129219	101240
J&K***	54.84	53.79	67.17	39.66	26.79	111475	109342	136542	80632	59491
Manipur	77.15	77.91	87.55	63.58	74.88	32304	32622	36658	26619	33547
Meghalaya*	90.89	92.64	98.25	42.57	85.25	31810	32424	34388	14901	37508
Nagaland**	31.42	28.55	44.44	28.74	21.88	7470	6788	10566	6834	5557
Sikkim	81.31	68.74	86.47	57.83	50.97	9895	8365	10522	7037	5502
Tripura	73.82	74.51	133.85	62.34	40.92	43028	43432	78020	36334	25990
A&N Island	99.09	103.49	101.79	84.35	65.09	6878	7183	7065	5855	4855
Arunachal Pradesh	64.81	65.28	63.78	40.10	38.23	15007	15115	14769	9286	9786
Chandigarh	79.64	85.60	112.72	64.06	78.45	12412	13341	17568	9984	12605
D & N Haveli	113.55	187.99	126.55	94.89	67.11	4576	7576	5100	3824	3009
Delhi	87.85	88.04	118.08	79.82	81.05	202409	202851	272057	183908	194514
Goa	103.77	106.31	108.89	87.03	90.26	19600	20079	20567	15438	18351
Daman & Diu	164.85	171.93	154.39	140.41	82.83	2631	2744	2464	2241	1423
L' Dweep	115.82	121.60	109.76	117.11	90.97	1625	1706	1540	1643	1330
Mizoram	76.51	77.25	99.58	65.06	77.09	16174	16330	21051	13753	18234
Pondicherry	142.59	208.91	200.93	130.15	117.99	20160	29535	28408	18401	17904
All India	98.19	98.86	101.51	89.11	78.10	21934138	22083473	22675215	19905804	19747042

Note: Figures are provisional

\*:Figures upto Feb.

\*\*Figures upto Jan.

\*\*\*Figures upto Dec.



14.11.14 *Potency Testing:* Field samples of the Polio vaccine, most sensitive of all vaccines to temperature changes, are taken on a regular basis to assess the quality of the cold chain through which the vaccines reach the beneficiaries. The test results for the last few years have indicated steady improvement in the efficacy of the vaccines being used.

Year	Samples Tested	Samples Satisfactory	%age Satisfactory
1987	1290	790	61.24%
1988	2196	1454	66.21%
1989	5423	4580	84.46%
1990	4228	4037	95.00%

14.11.15 *Disease Surveillance:* The impact of the Immunization Programme is necessarily to be measured in terms of incidence of these diseases. The surveillance systems to monitor disease incidence are being strengthened and all medical colleges in the country are being engaged in evaluating the Programme in their field

practice areas. They are also being developed as sentinel centres for disease surveillance. The present trends which are noticeable from the available information are encouraging. It has been noticed that the number of poliomyelitis cases being reported has significantly declined. So far as other vaccine preventable diseases are concerned, the declining trends in the case of poliomyelitis and diphtheria are noticeably significant. The disease incidence data for the last three years given below, supports this:

Reported Cases			
Disease	1987	1988	1989
Diphtheria	12,924	14,011	11,152
Pertussis	1,63,787	1,43,569	1,45,215
Tetanus (All)	31,854	32,729	24,774
Tetanus (Neo-Natal)	—	—	9,603
Poliomyelitis	28,250	21,146	13,866
Measles	2,33,981	1,43,542	1,52,942



## RURAL HEALTH SERVICES



**P** rimary Health Care approach seeks to provide universal comprehensive health care services relevant to the actual needs and priorities of the communities at a cost which people can afford. It is in this context that the National Health Policy seeks to bring about a shift in emphasis from hospital-based urban medical care to field-oriented health care. The creation of the primary health care infrastructure in the rural areas is, therefore, of prime importance for realisation of the objectives set forth in the National Health Policy and attaining the goal of 'Health For All by the Year 2000 A.D.'.

15.1.2 Coordinated efforts are being made under various rural health programmes to provide effective and efficient services to the people in the rural areas.

15.1.3 Numerous programmes and schemes are being implemented under the

Minimum Needs Programme to provide Primary Health Care relevant to the actual needs of the community in the rural areas. The status of establishment of the Sub-centres, PHCs and Community Health Centres under the Minimum Needs Programme, is detailed in ensuing paragraphs.

15.1.4 *Sub-Centres:* The Sub-centres are being established on the basis of one centre for every 5000 population in general and for every 3000 population in hilly, tribal and backward areas. The total number of Sub-centres established up to the end of the 6th Five Year Plan period that is by 31st March, 1985 was 84,053 as against the estimated total requirement of 1.37 lakh. The progress is as under:—

Functioning as on 1.4.85	—	84,053
7th Plan Target (1985-90)	—	54,612



7th Plan Achievement	—	51,237
Functioning as on 1.4.90	—	1,30,390
Target for 1990-91	—	4,765
Achievement during 1990-91 (April-Septemeber 90)	—	120
No. functioning as on 30.9.90	—	1,30,512

15.1.5 *Primary Health Centres*: It is envisaged to establish the Primary Health Centres on the basis of one PHC for every 30,000 population in the plain areas and for every 20,000 population in hilly, tribal and backward areas. It is proposed to convert all the existing rural dispensaries which are providing curative service only to function as Primary Health Centres which will be providing package of promotive, preventive and curative services. The existing position of PHCs is given below:—

Functioning as on 1.4.85	—	10,705
7th Plan Target	—	12,392
7th Plan Achievement	—	9,826
Functioning as on 1.4.90	—	20,531
Target for 1990-91	—	1,344
Achievement during 1990-91 (April-Septemeber 90)	—	1
No. functioning as on 30.9.90	—	20,532

15.1.6 *Community Health Centres (CHCs)*: It is proposed to establish rural hospitals with specialist facilities by upgraded PHC which will have 30 beds. it is envisaged to cover a population of about 1 lakh. The position in respect of CHCs is given below:—

Functioning as on 1.4.85	—	759
7th Plan Target	—	1,523
7th Plan Achievement	—	1,093
Functioning as on 1.4.90	—	1,852

Target for 1990-91	—	269
Achievement during 1990-91 (April-Septemeber 90)	—	1
No. functioning as on 30.9.90	—	1,853

## 15.2 Female Health Worker's Training Programme (ANM)

15.2.1 Each Sub-centre is manned by one Female Health Worker (ANM) and one Male Health Worker. In order to train required number of ANMs to man the Sub-centres, ANM training schools were established. There are 471 ANM Training Schools functioning in the country with an admission capacity of 22,041. During the year about 18,285 ANMs (according to incomplete figures) are likely to qualify from the existing training institutions.

## 15.3 Female Health Assistant's Training Programme (LHV)

15.3.1 One Female Health Assistant (LHV) has to supervise the work of 6 Sub-centres in the rural area. She is expected to provide technical guidance and support to ANMs who are working at Sub-centre level. Senior ANMs with minimum 5 years experience are given 6 months promotional training to become Female Health Assistant (LHV).

15.3.2 There are 45 Promotional Training Schools functioning in the country with admission capacity of 3,206.

15.3.3 *Training of Dais*: Majority of deliveries in the rural areas are conducted by dais. The overall aim is to train all untrained dais who are functioning in the rural areas so that they may be able to conduct aseptic deliveries. In order to improve the skills of dais and also to involve them in the propagation of small family norm, the scheme of training



of dais was launched. During the year 1989-90, against the target of 10,000, 9,341 dais have been trained.

#### 15.4 Multi-Purpose Worker MPW(M)

15.4.1 This scheme was initiated in 1982 to meet the additional requirement of Health Worker (Male) after conversion of the unipurpose worker to multi-purpose worker. It is a 100% Centrally sponsored Scheme and provides pre-service basic training to Health Worker (Male) who is posted at a Sub-centre along with the Health Worker (Female). The training programme at present is of one year's duration and this training is imparted to candidates with the minimum qualification of 10th pass and they are required to fill in a bond to serve in the rural areas for a minimum of two years.

15.4.2 This training was initially sanctioned at 47 training centres (44 HFWTCs + 3 Special Schools) in the years 1982 to 1985. As this training capacity was not enough to meet the requirement of training of additional 50,000 Health Workers (M), during the 7th Five Year Plan, a proposal for opening of 85 new schools was prepared and got approved by Expenditure Finance Committee. 50 of these schools were sanctioned by the Government of India in September 1987 with an admission capacity of 60 in each. Due to constraint of funds, the remaining 35 new schools have still not been sanctioned by the Government of India.

15.4.3 *8th Five Year Plan*: Physical target set was to train 50,000 HW(M) in order to achieve the norm of one HW(M) at each Sub-centre. For this purpose, additional training capacity would be required and it was proposed to open 85 additional new schools during this period as well as provide some additional inputs to the existing HFWTCs in order to improve the quality of training.

#### 15.4.4 Present Status

##### (a) Training at HFWTCs sanctioned in 1982-85.

- (i) Training has commenced at 44 out of 47 Training Centres.
- (ii) Training has still to commence in 2 HFWTCs in Bihar; and
- (iii) Meghalaya has discontinued the training after training only one batch.

##### (b) Training at 50 new MPW(M) Basic Training Schools.

- (i) Training has commenced in 27 schools (Assam—2; Jammu & Kashmir—1 out of 2; Karnataka—2; Madhya Pradesh—8 out of 10; Punjab—2; Rajasthan—7, Tamil Nadu—2, West Bengal—2; and Tripura—1).
- (ii) 23 schools have still to commence functioning in the States of Andhra Pradesh—6; Bihar—2; J&K—1; Madhya Pradesh—2; Rajasthan—9; Tamil Nadu—2; and Uttar Pradesh—1.

#### 15.5 Orientation Training of Medical and Para-Medical Personnel

15.5.1 This is a Centrally sponsored scheme under Family Welfare. It was started with the objective to train medical and para-medical personnel working at PHCs and Sub-centres including their Trainers. The categories covered under the scheme consist of M.O. PHC, HA(M) and HA(F), H.W.(M) and HW(F) and Key Trainers. Each category is placed to be imparted training in the same institution, where they had their basic training. The duration of training is two weeks.

15.5.2 *Pattern of Assistance*: The Financial assistance admissible under the



scheme is in the form of 100% non-recurring grant towards hostel for 20 trainers along with lecture and demonstration room, furniture for hostel and class room, kitchen articles, training equipment and aids. The recurring grant is admissible on 50 : 50 sharing basis between the Government of India and the State Governments and the components covered under this are: Rent for hostel till this building is completed, contingency, consumable training material, additional teaching staff for hostel and class rooms H&FTCs and stipend for the trainees. H&FTCs which have been augmented under the scheme of basic training of MPW(M) are not admissible for any financial assistance under the scheme of orientation training of medical and para-medical personnel; only stipend is admissible to trainers in these institutions. Regarding UTs, as they do not have enough training facilities available with them, they will seek the assistance of adjoining States to train their personnel.

15.5.3 *Progress:* The scheme has already been sanctioned to the States of Maharashtra, Himachal Pradesh, Gujarat, Karnataka, West Bengal, Haryana, Punjab, Kerala, Andhra Pradesh and Madhya Pradesh and also to the U.T. of Andaman & Nicobar Islands. Proposals have also been received from the States of U.P. and Jammu and Kashmir and UTs of Arunachal Pradesh and Dadra and Nagar Haveli.

15.5.4 *Progress of expenditure:* The 7th Plan allocation for the scheme was Rs. 1,000 lakh. The details of allocation releases made and anticipated expenditure is as stated below:—

<i>Year</i>	<i>Allocation</i>	<i>(Rupees in lakhs)</i> <i>Anticipated expenditure</i>
1	2	3
1985-86	Nil	0.00
1986-87	50.00	7.96

1	2	3
1987-88	150.00	5.02
1988-89	100.00	10.13
1989-90	50.00	65.00

15.5.5 During 1990-91 only Rs. 50 lakh have been sanctioned for this scheme which is not even sufficient to meet the continuing liability of the scheme; no funds would be available for expansion of the existing institutions. Funds however would still be required for meeting the continuing liability of existing Institutions.

15.6 **Maintenance and Strengthening of 47 Health and Family Welfare Training Centres (H&FWTCs)**

15.6.1 Health & Family Welfare Training Centres (H&FWTCs) are established in the country to impart in-service training programme to the staff working at Primary Health Centres. These training centres were set up with 100% financial assistance by the Central Government under the Family Welfare Programme.

15.6.2 Initially, these H&FWTCs were taking up training of the staff under Family Planning Programme but from 1974 onwards Multi-purpose Workers Scheme was sanctioned in the country. They also took up the training of Medical Officers and Uni-purpose Workers for the multi-purpose concept. These training centres provide in-service training to all the family welfare and health functionaries working at the block level and below.

15.6.3 In-service training programme has been recognised as a necessary tool to update the skills of the workers working for the primary health care. In order to improve the efficiency and skills to attain the goals of Health for All by 2000 A.D., in-service training has been recognised as a necessary vehicle.



15.6.4 The following training programmes are taken up by H&FWTCs:

1. Medical Officers	2 weeks
2. Health Assistants (Male & Female)	2 weeks
3. Block Extension Educators	4 weeks
4. Key Trainers of ANM Schools	2 weeks
5. Basic Training of Health Workers (Male)	1 year
	(from 1982 onwards)

15.6.5 *Funding Pattern of Health and Family Welfare Training Centres:* The H&FWTCs were funded under 100% Central assistance from the Family Welfare Budget for which expenditure is provided for the following components:

*Non-Recurring*

1. Vehicles (one bus, one mini-bus and one jeep or two mini-buses and one jeep) and equipment including duplicating machine, projector, typewriter and furniture.	Rs. 1,36,500 (old expenditure)
2. Construction	Cost of 20350—20450 sq. ft. plinth area as per the blue print of GOI.

*Recurring (per annum):* funding assistance is not increased since 1965.

3. Pay & Allowances, etc. of the staff (As per pattern)	Rs. 5.7 lakh (present)
4. Contingencies including purchase of educational material, books for library, periodicals, postage, telephone charges, electricity and water charges, printing & stationery and other items.	Rs. 6,000.00
5. Cost of petrol & maintenance of vehicles at the rate of Rs. 12,000/- per vehicle.	Rs. 36,000.00
6. Rent for training centre and hostel for the trainees in case Government accommodation is not available.	Rs. 18,000.00

15.6.6 Out of 47 H&FWTCs, 10 H&FWTCs are still in rented building.

15.6.7 As per report received in RHD, personnel trained during 1989-90 by H&FWTCs is as under:—

Medical Officers	2,257
Block Extension Educators	503
Health Assistants (Male & Female)	1,774
Health Worker (Male & Female)	2,289
Others	1,206
	8,029

15.7 **Laboratory Facilities at PHCs and Rural Dispensaries**

15.7.1 This is a Centrally sponsored health scheme introduced during the 7th Plan with the objective to provide laboratory facilities at PHCs catering to 30,000 population in normal areas and 20,000 population in hilly, tribal and difficult areas; so as to enable them to carry out routine investigations and diagnose diseases pertaining to National Health Programmes. The States are to provide the post of the laboratory technician under State Sector Minimum Needs Programme.

15.7.2 *Pattern of Assistance:* Pattern of assistance admissible under the scheme is as noted:

*Non-recurring:* Expenses for equipment including Microscopes @ Rs. 5,000/- per unit.

*Recurring :* Laboratory reagents and glassware @ Rs. 1000/- per unit per year.

15.7.3 The scheme has already been sanctioned for the State of Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Kerala and Rajasthan during the year 1988-89; whereas sanction for the remaining States has been issued during the year 1989-90. The target during the year 1988-89 and 1989-90 was to establish 1617 and 1500 laboratories respectively.



## 15.8 Village Health Guide Scheme

15.8.1 The Village Health Guide Scheme was introduced on 2nd October, 1977 in all the Primary Health Centres in the country. The scheme was accepted by all the States except Tamil Nadu, Jammu and Kashmir, Kerala and Arunachal Pradesh who are running their own alternative schemes. A Health Guide undergoes training in promotive, preventive and elementary health care so as to provide an integrated Primary Health care at the grass-root level. Training is arranged in the nearest Primary Health Centre, Sub-centre or any other place for a duration of 3 months. During the training period, the Health Guide is paid Rs. 600/- as stipend and on completion of the training a manual, a medicine kit and simple medicines are provided to treat minor ailments. The Health Guides receive an honorarium of Rs. 50/- per month to meet out-of-pocket expenditure and drugs worth Rs. 50/- per month.

15.8.2 The criteria of selection of Village Health Guide is that he or she enjoys the confidence of the society and is willing to serve them. The person should be preferably below 30 years of age with formal education of

at least up to class VIth standard or at least be able to read and write.

15.8.3 It is not possible to operate this scheme optimally due to the scheme being subjudice. The Evaluation Report of National Institute of Health and Family Welfare, New Delhi shows that the scheme was largely accepted by the community in a big way and the health guides perceived their role in a very positive manner. The scheme was found to be technically and administratively sound.

15.8.4 The whole scheme is provided a well planned and executed training at the entry point by supervision of the job requirement opportunity and periodical training programme. There is a proposal for appropriate linkage with Panchayat and the scheme will receive full technical support like training in refresher course under supervision of medical officers of Primary Health Centre with the help of Block Extension Educator/Officer and Health Assistants.

15.8.5 Almost all the Primary Health Centres of the country have been covered under this scheme and 4,10,000 Health Guides have been trained upto 30.9.89. A budgetary provision of Rs. 2,400 lakh has been made for this scheme for the current financial year.



## DEMOGRAPHIC RESEARCH AND EVALUATION



**I**n order to carry out research studies on various socio-economic, demographic and communication aspects of Population and Family Planning Programme, 18 Population Research Centres are at present functioning in various parts of the country. These centres are located in Universities and Institutes of national repute while one centre has been functioning under the State Government of Madhya Pradesh. These Centres are provided cent percent financial assistance from Central Govt.

16.1.2 During the year 1989-90, 72 research studies/papers were completed by these Population Research Centres while 80 research studies/papers were at various stages of progress as on 1.4.90. Important topics covered by these centres are as follows:

i) Role of incentives and disincentives in the acceptance of Family Planning;

- ii) Socio-cultural and economic development; its inter-connection with population growth, control and redistribution (Pre-project Survey);
- iii) Fixation of Family Planning targets at the grass-root levels—Feasibility study;
- iv) Attitude of Male Non-acceptors towards contraception;
- v) Evaluation of Family Welfare & MCH Programme;
- vi) Contrasting Patterns of Nuptiality and Fertility in SAARC Region;
- vii) Laparoscopic Sterilisation camps and Family Welfare Programme;
- viii) Study to identify the reasons for non-acceptance of temporary



methods and factors which would increase acceptance;

Western Uttar Pradesh—A field report.

ix) Retention rates of IUD and reasons for discontinuation of IUD; and

x) Community Participation in Health Care and Family Planning in

16.1.3 A statement showing the quantum of funds released during 1989-90 to each PRC receiving grants-in-aid between Rs. 1 lakh to Rs. 5 lakh and studies completed/in progress during the year 1989-90 by the PRCs is given below:

Statement showing the amount of Grants-in-Aid released and studies completed during 1989-90 and in progress as on 1.4.90 by Population Research Centres receiving Grants-in-Aid of Rupees one lakh and below Rupees 5 lakh

Sl. No.	Name of the P.R.C.	Amounts of Grants in-aid released during 1989-90 in Rupees	Studies completed during 1989-90	Studies in Progress as on 1.4.90
1	2	3	4	5
1.	Population Research Centre, Deptt. of Statistics, Andhra University, Waltair (Visakhapatnam) Pin-530 003	4,93,924	<p>1. A study on Immunisation of children below age 2 years and immunisation of expectant mothers in Medak district of Andhra Pradesh.</p> <p>2. Study on differentials in fertility rates between acceptors and non-acceptors of Family Planning in Andhra Pradesh.</p> <p>3. Caste Differentials in the characteristics of acceptors and non-acceptors of Family Planning Programme in Medak District of Andhra Pradesh.</p>	<p>1. A study of Inter-District variations in Population Growth and Family Planning in Andhra Pradesh.</p> <p>2. A study of Evaluation of FW &amp; MCH Programme in Guntur District of Andhra Pradesh.</p> <p>3. A study on acceptors of Family Planning to assess the benefits desired in Guntur district.</p>
2.	Population Research Centre, Department of Economics, Himachal Pradesh University, SHIMLA-161 006.	1,02,000	—	1. Evaluation of FW & MCH Programme in District Shimla.
3.	Population Research Centre, Mohanlal Sukhadia University, Udaipur (Rajasthan) Pin-313 001.	2,43,100	<p>1. Evaluation of MCH Programme in a district of Rajasthan.</p> <p>2. Evaluation of FW Programme in Pali District of Rajasthan.</p>	<p>1. Evaluation of FWP in Bharatpur district of Rajasthan.</p> <p>2. Evaluation of FW &amp; MCH practices in selected areas of Rajasthan.</p>



1	2	3	4	5
			3. Follow up study of Sterilisation and IUD acceptors in two PHCs of Rajasthan.	
4.	Department of Statistics, Population Research Centre, Utkal University, Vani Vihar, Bhubaneswar Orrisa-751 004.	1,87,861 .	1. Evaluation of FW & MCH Programme: Contraceptive study in three PHCs of Balasore District.  2. Sociological study on elderly persons of low income homes in Bhubaneswar city.  3. Child labourers in Bhubaneswar city.	1. Evaluation of FW & MCH Programme in Kalahandi district.  2. Factors inhibiting achievement in a PHC.  3. Role of ANM in motivation of F.P. acceptors and her limitations.  4. Evaluation of FP & MCH programme in Phulbhani district.  5. Study in management aspects of FW Programme.  6 Study on time utilisation on various job aspects at periphery by the various level of workers from PHC. Medical Officers to down the line.
5.	Population Research Centre, Department of Statistics, Gauhati University, Guwahati-781 014 (Assam)	3,83,829		1. Contraception by method in rural and urban areas.  2. Immunisation of children below age 2 years and Immunisation of expectant mothers.  3. Study on attitude of acceptors and non-acceptors of Family Welfare Programme towards the temporary contraceptive methods.

## 16.2 Concurrent Evaluation of Family Welfare Programme

16.2.1 The Family Welfare Programme has grown in many dimensions over the years alongwith the size of the financial outlays. A programme of this scale and magnitude would require close observations so as to be satisfied with the trend and

direction in which it is moving. Consequently, both quantitative and qualitative assessment of the different components of the programme would assume great relevance and significance. With this end in view, the Department formulated a mechanism of Concurrent Evaluation involving collaboration with some autonomous/independent agencies.



16.2.2 All the aspects of the infrastructure, staff position and their training, availability of medicines, quality of service etc. are covered through the schedules for PHC, Sub-centre and the assessment of the programme would be done through the interviews of the acceptors/beneficiaries of FP and MCH and other households. The main emphasis in this scheme is on input and process evaluation and it is anticipated to provide continuous feed back on the above aspects from the selected units and help in the identification of the factors influencing the programme and those necessary to improve the programme.

16.2.3 Concurrent Evaluation was planned

to be carried out in 17 major States. However, it was started with 15 major States in August 1989 and in November, 1989 it was extended to the remaining two States. One district was selected in a month from each State for evaluation. In the States of Uttar Pradesh and Madhya Pradesh two districts were selected. The data collected during the months from August, 1989 to October, 1989 was analysed and the report has been prepared. The data for the remaining period is being analysed. Field work has been discontinued from September, 1990 with a view to review the work done so far and to resume at the earliest, after incorporating necessary changes.



## ORGANISED SECTOR AND VOLUNTARY ORGANISATIONS



**T**he Organised Sector in India which employs over 25 million workers offers a very potential area for Family Welfare activities by educating and motivating these workers employed in Government and Non-Government sectors who share common job patterns and socio-economic life styles. In Addition, special schemes have been formulated to effectively involve the voluntary organisations in promotion of small family norm to make it a people's movement.

### 17.2 Organised Sector

17.2.1 The National Family Welfare Programme in the Organised Sector is being implemented through the Ministry of Railways, Ministry of Defence, Ministry of Labour, P&T Department etc. in the Government Sector and the Public Sector Undertakings like HEC-Ranchi, BHEL-Bhopal and Ranipur and selected volun-

tary/employers' organisations in the private sector. The necessary inputs for staff, supplies etc. to these Ministries/Under-takings are provided by the Ministry of Health & Family Welfare. In addition, family welfare education and motivation programme for the workers in the Organised Sector under the purview of Ministry of Labour is carried out in selected Project areas in the country with ILO/UNFPA assistance through the Government budget. The budgetary provision made for 1990-91 and 1991-92 for these units is as follows:—

<i>(Rs. in lakhs)</i>		
<i>Name of the Ministry/ Department/ Organisation</i>	<i>B.E. 1990-91</i>	<i>B.E. 1991-92</i>
1	2	3
Ministry of Railways	313.00	390.00



1	2	3
Ministry of Defence	155.00	260.00
P&T Department	6.00	7.25
Border Road Dev. Organisation	0.10	0.10
Public Sector Undertakings	3.74	5.00
<i>Ministry of Labour</i>		
i) Population Cell	2.00	2.00
ii) ILO/UNFPA Projects	98.00	165.00
Voluntary Organisations in the Organised Sector	15.00	20.00

**17.2.2 Ministry of Railways:** The Indian Railways provide health and family welfare services to about 80 lakh Railway people and their families through 62 Family Welfare Centres, 38 Sub-centres, 645 Health Units, 2663 Nirodh Depots and 122 Oral Pill Distribution Centres. Details of achievements in the Family Welfare activities including MCH under the Railways during 1989-90 and 1990-91 are given on the next page.

**17.2.3 Ministry of Defence:** The Family Welfare Programme in the Ministry of Defence is being implemented through 139 Family Welfare Centres under the administrative control of the three Services Headquarters and the Director General Ordnance Factories, Calcutta. Each Family Welfare Centre is headed by a Lady Medical Officer supported by other para-medical staff. Family planning education and services including maternal and child health care constitute an integral part of the health care programme provided by the Ministry. The performance of the Ministry of Defence in various F.W. and MCH activities during 1989-90 and 1990-91 is detailed on page 208

**17.2.4 P&T Department:** P&T Department

continued implementing Family Welfare Programmes by motivating and educating and providing services to the eligible couples to adopt small family norm through their 54 P&T Dispensaries in the country during the year. Out of 36,282 eligible couples covered by selected P&T Dispensaries, 13,383 couples adopted different family welfare methods during 1990-91 (upto Septemeber, 1990).

**17.2.5 Border Roads Development Organisation:** The Border Roads Development Organisation continued to carry out Family Welfare activities as usual for its labour and work force residing in camps during the year 1990-91 also.

**17.2.6 Ministry of Labour Population Cell:** The Population Cell set up in the Ministry of Labour with the budgetary support of Department of Family Welfare continued looking after implementation of National Family Welfare programme in the Organised Sector during the year.

**17.2.6 (i) ILO/UNFPA Projects:** The seven on-going Projects implemented during 7th Plan in various Project areas with ILO/UNFPA assistance, each with duration of about 3 years, have terminated by June, 1990. The workers covered by these Projects included industrial workers; shanty and slum dwellers; workers in selected sugar factories and population residing in the sugarcane belt; insured workers under the ESIC Scheme etc. The Department of Family Welfare have had these Projects finally evaluated by independent agencies, consultancies. The implementation has been found satisfactory.

**17.2.6 (i) (a):** Of the 4 new projects to be undertaken during 8th Plan with UNFPA assistance, one relating to Working Women in Tamil Nadu at UNFPA Project cost of Rs. 1.02 crore has been launched in April, 1990. The remaining 3 Projects mentioned below have been approved



by Govt. of India and were pending with UNFPA for their approval till November, 1990:—

<i>Name of the Project</i>	<i>UNFPA Project Cost</i>
	<i>Rs. in Crore</i>
1. Family Welfare Education for Beedi Workers(4 years—1991-94)	Rs. 1.80 crore
2. Family Welfare for Tribal Population in Gujarat (5 years—1991-1995)	Rs. 1.74 crore
3. Parasite Control and Family Welfare for Plantation Workers in West Bengal (5 years—1991-95)	Rs. 1.57 crore
4. Another 3½ year Project proposal for 'Family Welfare for Milk Producers in Gujarat' was under consideration of the Ministry for UNFPA funding.	Rs. 0.39 crore

17.2.6 (i) (b) At the instance of Department of Family welfare, LAPTAP, ILO

engaged consultants for undertaking studies, preparing approach paper etc. in respect of five identified areas viz. Plantation Sector, Cooperative Sugar Factories, Fishermen's Cooperatives, Dairy Cooperatives and Khadi and Village Industries Sector in August, 1990. The outcome of these studies is likely to be made available by mid-1991.

17.2.7 *Public and Private Sectors:* Department of Family Welfare provides grant-in-aid to the Public Sector Undertakings namely, HEC-Ranchi, BHEL-Bhopal and Ranipur for the maintenance of the Family Welfare Centres and carrying out the Family Welfare Programme in each of these enterprises during the year.

17.2.7 (i) Suitable Voluntary/Employers' Organisations are being identified in the Private Sector for implementing Family Welfare Programme for the workers in the Organised Sector in order to utilise funds provided for the purpose.

### Ministry of Railways

(Ref. Para 17.2.2)

<i>Performance</i>	<i>1989-90 (Sept. 89)</i>			<i>1990-91 (Upto Sept. 1990)</i>		
<i>Method</i>	<i>Target</i>	<i>Achievement</i>	<i>%</i>	<i>Target</i>	<i>Achievement</i>	<i>%</i>
1	2	3	4	5	6	7
Sterilisation	13,510	10,639	78.7	14,168	10,623	74.9
I.U.D.	10,045	5,862	58.4	7,112	5,693	79.9
C.C. Users	3,78,921	3,17,900	83.9	3,87,419	2,70,750	69.8
O.P. Users	4,056	3,566	87.9	4,307	4,476	103.9

### MCH Services

1. D.P.T.	1,00,000	29,793	29.79	1,05,400	28,211	26.76
2. Polio	1,00,000	30,633	30.63	1,05,400	28,713	27.24
3. B.C.G.	1,00,000	33,047	33.04	1,05,400	3,204	30.40
4. Measles	1,00,000	13,510	13.51	1,05,400	19,041	18.06
5. T.T. (P.W.)	1,00,000	30,477	30.47	1,15,900	28,724	24.78



1	2	3	4	5	6	7
6. Iron & Folic Acid Tabs. for Women	2,07,000	1,18,536	57.26	2,07,000	1,06,239	51.23
7. Children	4,00,000	1,19,085	29.77	4,00,000	1,09,951	27.48
8. Vit. 'A'	4,00,000	2,99,801	37.47	4,00,000	3,40,782	42.59

<i>Performance</i>	<b>Ministry of Defence</b>			<i>(Ref. Para 17.2.3)</i>		
	1989-90 (Sept. 89)			1990-91 (Upto Sept. 1990)		
	<i>Target</i>	<i>Achieve- ment</i>	<i>%</i>	<i>Target</i>	<i>Achieve- ment</i>	<i>%</i>
<i>Method</i>						
Sterilisation	10,115	8,616	85.2	10,780	7,800	72.3
I.U.D.	7,000	6,317	74.2	8,540	6,665	78.0
C.C. Users	68,144	52,462	77.0	58,865	44,827	76.15
O.P. Users	3,591	4,036	112.4	3,722	3,471	93.2
<i>Propylaxis against Anaemia</i>						
— Mothers	51,500	67,020	130.1	65,000	74,380	114.4
— Children	50,000	18,719	37.4	50,000	18,786	37.5
Vitamin 'A'	50,000	24,358	48.7	50,000	31,104	62.2

### 17.3 Voluntary Organisations

17.3.1 In order to involve Voluntary Organisations in the Family Welfare Programme, the Central Government has evolved two types of funds-assistance to be given to these organisations for their projects. Grants are, therefore, sanctioned in the following manner.

17.3.2 *Centrally Sponsored Sector Schemes:* In this Sector, grants to Voluntary Organisations are mainly sanctioned through the State Government/Union Territories under approved pattern Scheme and the amount is reimbursed to the State Government/UTs by the Government of India.

17.3.2 (i) *Central Sector Schemes:* Grants are also sanctioned under the Central

Sector to voluntary organisations for projects which are innovative and experimental in nature. For this purpose a scheme titled the Innovative/Experimental Scheme is in operation. Financial assistance is given for projects involving Family Welfare services including MCH, Immunisation, Population Education and Motivation. To promote a network of activities, the Family Planning Association of India (FPAI) has also been chosen under this Scheme to provide services to smaller voluntary organisations in formulating their projects. The FPAI has also been entrusted to give financial assistance to smaller voluntary organisations for schemes not costing more than Rs. 1 lakh per annum. A Rolling Fund of Rs. 5 lakh has been placed at the disposal of the FPAI for this purpose. This decentralisa-



tion of the grant-in-aid procedure has helped 27 organisations so far to avail themselves of Central Government assistance through the Family Planning Association of India.

17.3.2 ( ii) As an off-shoot of Innovative Scheme, with the specific objective of promoting community participation in rural areas at the grass-root level, a high-powered Standing Committee on Voluntary Action (SCOVA) was set up in 1986. Two Model Schemes were also evolved, i.e. the Mini Family Welfare Centre Scheme and Performance Linked Model Project Scheme. Workshops were held in Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan and Orissa in order to acquaint small organisations about the availability of assistance under SCOVA.

17.3.3 *Eighth Plan Projections:* During the 8th Plan period also it is proposed to continue the “Innovative/Experimental Scheme” for grant-in-aid to the voluntary sector. The emphasis of the scheme will continue to be on the implementation of the Family Welfare Programme, including maternal & child health and immunisation activities through voluntary sector

projects in rural and urban slum areas of the country. The intention of promoting the small family norm through motivation and education of women, raising of Couple Protection Rate and provision of ante-natal/post-natal care and child health will be reinforced thereby. These activities generated through the Voluntary Sector Projects will consequently result in an enhancement of the status of women, their level of awareness and also provide them occupation, since the scheme provides for the involvement of women in voluntary sector projects as motivators also. Apart from this, and in order to involve and encourage a greater number of voluntary organisations, a series of regional conferences of voluntary organisations are proposed to be held in order to acquaint them with the facilities which the Government can provide to them for starting projects. To ensure a streamlined project funding system, it is also proposed to simplify the various procedures of grant-in-aid.

17.2.4. A list of the Voluntary Organisations to whom grants have been sanctioned under the Central Sector Scheme so far is given in the Table below:

Table

Details of grants released during the year 1990-91 so far, under the Innovative/Experimental Scheme/Mini Family Welfare Centre Scheme regarding involvement of voluntary organisations in the Family Welfare Programme;

S. No.	Name of the Vol. Orgn.	Amount in Rs.	Purpose/Title of the Project
1	2	3	4
1.	Family Planning Association of India, Bombay	8,01,500	Reimbursement to Rolling Fund for involvement of Small Voluntary Organisations.
2.	Parivar Seva Sanstha, New Delhi	3,00,000	MTP Services.
3.	F.P.A.I., Bombay	50,000	Implementation of Rolling Fund Scheme and Consultancy Services for NGOs.
4.	Quilon Special Service Society, Kerala	2,00,000	H&FW Services in Fisheries Villages in Quilon District.



1	2	3	4
5.	CLEAR, New Delhi	1,40,000	Family Welfare through Education and Motivation among the Coal Mine Labourers of Orissa, M.P. and Maharashtra.
6.	SOS Children's Villages of India, New Delhi	54,000	Community Health & Family Welfare Services in Tambram & surrounding areas (T.N.)
7.	Tarun Sangha, P.O. Biswas, Distt. Midnapur, West Bengal	36,850	Mini Family Welfare Centre at Village Sasati, Shyampur II Block of Distt. Howrah, West Bengal.
8.	Jai Gayatri Ma Bal Vidya Mandir Samiti, V. & P.O. Jagmanpur, Distt. Jalaun, U.P.	29,850	Mini Family Welfare Centre at Jagmanpur, Rampura Block, Distt. Jalaun, U.P.



## MASS EDUCATION AND MEDIA ACTIVITIES



**T**he success of family welfare programme depends on voluntary acceptance of the small family norm by eligible couples. Information, education and motivation activities, therefore, continue to play a significant role in overall implementation of the programme.

18.1.2 During 1990-91, Media activities were geared up to (i) strengthen the base line functionaries by improving their knowledge and skills for a better, result-oriented message delivery nearest to the door-steps of the target families; (ii) pay increasing attention to inter-personal communication in the overall media gamut to help generate the demand for services in the community; and (iii) accelerate the pace of bridging the gap between a widespread awareness of 95 percent and the actual adoption level of about 43 percent. Furthermore, the in-

house software production cell for preparing audio-visual programmes and print media prototypes for countrywide utilisation were provided a new direction and fillip to make these activities more responsive to the programme needs.

18.1.3 The I.E.C. activities and population education endeavour received a new thrust in consonance with the communication strategy. Through systematic efforts, the message of planned and responsible parenthood was specially directed towards younger couples to make a significant dent on the birth rate and bring it down from the present 30.5 per thousand (SRS-1989) to 21 per thousand by 2000 AD, as stipulated under our National Health Policy.

### 18.2 Salient Initiatives

18.2.1 During the year under report, the



Communication strategy continued to be implemented to broaden the scope of family welfare messages from a macro-demographic stereo-type with narrow emphasis on sterilisation to life cycle approach—population education for the young, raising the age of marriage, safe motherhood, spacing, child survival, (ORT, Immunisation), ante-natal and natal care with a stress on women's status to counteract the son preference and promote male responsibility to share the contraceptive burden. Media activities in the States at the peripheral level were further strengthened and streamlined. MEM activities were given a multi-dimensional and integrated thrust to increase the outreach and impact of family welfare messages. The use of mass media channels continued during the year. The following initiatives were taken as part of the communication strategy:—

- i) Enlisting community participation by instituting women groups—called Mahila Swasthya Sangha (MSS) in villages having more than 1000 population in selected districts on experimental basis.
- ii) Joint and systematic training of health educators and critical functionaries of government who are implementing programmes like women's welfare and child nutrition, rural development and education.
- iii) Involvement of non-governmental organisations in health education and training.
- iv) Production of information and educational materials containing thought-provoking messages with local, cultural orientation for better acceptability.
- v) Development of State media plans based on differentials that exist

among areas so as to optimise utilisation of media resources.

### 18.2.2 Community Participation

18.2.2 (i) *Mahila Swasthya Sanghs*: To strengthen community participation, it was proposed that Mahila Swasthya Sanghs (MSS) be constituted on experimental basis in all villages having more than 1000 population or 200 households in one or more than one district in 17 major States. The MSS will comprise 15 persons of whom 5 will be village level Government functionaries. The remaining ten will be women selected from each social community such as Scheduled Castes, Scheduled Tribes, Backward Classes, small farmers, weavers, fishermen, etc. This women's group will help, strengthen and facilitate ANM to obtain support from other women colleagues working in the villages for the welfare of women and children and also covering health programmes i.e. immunisation, ORS, spacing methods, etc. This group will also motivate their women folk to take up adult literacy, avail themselves of loans (taken from IRDP), send their children to school, etc. The working of the MSS will be facilitated through training to its members, supply of educational materials, guidance of local level health workers and provision of health services.

18.2.2 (ii) *Grants to Non-Governmental Organisations (NGOs)*: To promote and involve NGOs in the IEC activities, funds were provided to States to identify three NGOs. Any registered body implementing development programmes for women, adult literacy or health care in over 25 villages will be selected for grants. The selected NGOs will promote immunization, safe delivery, child survival measures, sanitation and personal hygiene.

18.2.2 (iii) *Training in Communication Skills*: To further enhance the knowledge and sharpen the skills of health personnel especially 'Block Extension Educators', it



was decided to conduct modular training programmes at selected Health and Family Welfare Training Centres. An expert committee was constituted in the Ministry to review existing training programmes/courses conducted for BEEs and to help design need-based training modules. The training package was prepared with the help of a leading voluntary agency and made available to training centres for conducting training of BEEs. In addition to the training of BEEs, joint training of ANMs and Anganwadi Workers were conducted to help these two critical functionaries appreciate the commonality of their role and support each other in their day to day working.

18.2.2 (iv) A Workshop on Diarrhoea Case Management was held at Faridabad with UNICEF assistance on 7th and 8th June, 1990 for State Media Officers. Following this workshop, a nation-wide campaign was launched for prevention and management of Diarrhoea.

18.2.2 (v) Two orientation training courses were organised for the District Extension and Media Officers at Family Welfare Training & Research Centre, Bombay in which 39 DEMO's were imparted training. It is envisaged that the trained DEMOs will in turn train the Block Extension Educators under their control in the Communication Skills to achieve better credibility in the field.

18.2.2 (vi) *Workshop for Artists and Photographers:* A Workshop on 'Communication Methodology and Skills' was organised at the National Institute of Design, Ahmedabad from January 14 to 25, 1991 for Artists-cum-Photographers working under the Family Welfare Programme in the States to update them on the communication processes for carrying the message to the target audience. Editors and Sr. Artists from the Centre assisted in the conduct of the Workshop which produced about 40

items on various components of the programme.

18.2.3 *Orientation Training Camps:* For ensuring that doubts and misgivings hampering the adoption of family welfare measures are dispelled and popular support for the programme enlisted, extension education activities were intensified. In this connection orientation training programmes were organised for school teachers, Panchayat members and development functionaries for securing their active participation in spreading the family welfare message.

18.2.4 A set of five posters and related educational materials on prevention and management of diarrhoea were designed, developed and sent to States in regional languages (s) including Hindi and English for use during diarrhoea prevention and management campaigns.

18.2.5 For suggesting an integrated media strategy for women and child development to be implemented by all the concerned Ministries/Departments, a Committee was constituted which has submitted a detailed report which is being examined for implementation.

18.2.6 The annual action plan for MEM activities for 1990-91 prepared by the State Government in consonance with the revised strategy and using differential approach to planning was examined and approved for implementation.

18.2.7 *In-house Production of Video Spots:* The Media Division has its in-house production arrangement and produces audio-visual programmes for telecast on Doordarshan as well as for distribution to Field Units. During the year, production of 10 video spots was completed. Of these, three were on Spacing, Copper-T and Oral Pill, two on Tubectomy, one on Vasectomy, two on Diarrhoea, one each on Immunisation and Vitamin 'A' deficiency. Two spots on vasectomy were got produced



through ET&TDC. Copies of the video tapes produced in-house were made available to the State Governments and other Field Units for exhibition.

18.2.7 (i) Through the efforts of the Media Division, the Population Clock developed by Indian Institute of Population Studies, Bombay, was introduced on Doordarshan for telecast. The Pal Encoder was installed in the Ministry's Computer Room for this purpose. The Population Clock is being shown on TV regularly. Efforts are on to have the Population Clock installed at prominent sites in Delhi.

18.2.8 *Participation in the India International Trade Fair 1990*: The Media Division participated in the India International Trade Fair held at Pragati Maidan, New Delhi from 14th-23rd November, 1990. An attractive display of photographs, graphs, charts, etc. was arranged through DAVP at the permanent pavilion of the Ministry. More than 37,000 people visited the pavilion and thousands availed themselves of the facilities provided for health check-up, F.W. counselling and eye donation declaration. A special feature of this year's participation was various children's programmes organised at the pavilion with the cooperation of the Delhi Administration and cultural programmes by S&D Division and film shows by Directorate of Field Publicity, Ministry of I&B.

### 18.3 Media Set-up

18.3.1 The Mass Education & Media Division set up at the Centre in the Ministry of Health & Family Welfare looks after Information, Education and Communication (IEC) work. There are Mass Education & Media set ups in the States and Union Territories also. The Media Units of the Ministry of Information & Broadcasting are supplementing the implementation of Family Welfare policies and programmes. The MEM Division at Headquarters lays down the communication policy and provides guidelines, directs,

coordinates and monitors the media activities conducted by the State Mass Education & Media set ups as well as interacts with the Media Units of the Ministry of I&B. The Division also designs and prepares prototypes for various media software and provides general support for implementation of different media projects. Efforts were sustained to bring about qualitative as well as quantitative improvements in the performance of various media channels.

### 18.4 MEM Budget

18.4.1 The allocation for MEM activities for 1990-91 was Rs. 1724.00 lakh, out of which Rs. 901.00 lakh was allocated to the States and Union Territories, Rs. 650.00 lakh for Mass Media Units of the Ministry of Information & Broadcasting and Rs. 173.00 lakh were earmarked for the Central Projects of Mass Education and Media Division.

### 18.5 Media Units of Ministry of Information & Broadcasting

18.5.1 During the year under report, the Media Units of the Ministry of Information and Broadcasting continued to disseminate information to popularise the two child family norm and focus attention on maternal and child health, including immunisation and related programmes for child survival. The Media Units also focussed on issues beyond family planning but having a bearing on the ultimate acceptance of the programme. As against Rs. 640 lakh allocated to these Media Units in 1989-90, an allocation of Rs. 650 lakh was made during 1990-91.

18.5.2 *Doordarshan*: Doordarshan has been providing IEC support to the Health & F.W. through telecasts during different time slots. Doordarshan Kendras telecast video spots and quickies on various aspects of Health & Family Welfare during the free time allotted for this purpose as well as during other programmes meant for different target groups.



18.5.2 (i) Doordarshan telecast special programmes in connection with World Health Day and No Tobacco Day, World Population Day in the form of discussions, quickies interviews, etc. Interview-based programmes on eye-care of children, emergency aid, accupuncture, heart problems and micro-surgery were telecast regularly by various Doordarshan Kendras. Special chunks like *Gharelu Nuskhe*, *Jaan Hai Jahan Hai*, *Swasthya Prashnorti*, *Aap Ka Pariwar* and *Aap Ki Sehat* have been provided by Doordarshan Kendras in which programmes connected with Health & F.W. were telecast in various formats. Programmes like *Grameen Mahilaon Ke Liye* and *Krishi Darshan* were also utilised to cover these topics.

18.5.2 (ii) A special campaign regarding prevention and cure of diarrhoeal diseases was launched when a good number of programmes were telecast by Doordarshan Kendras on the subject. Spots on the subject are shown regularly.

18.5.2 (iii) The occasions of *Akha Teej* was utilised to launch educational campaigns against child marriage. Delhi Doordarshan telecast a special programme entitled *Sau Baton Ki Baat* based on Family Welfare.

18.5.2 (iv) On the initiative of the Media Division, Delhi Doordarshan introduced the regular telecast of Population Clock from August, 1990. The budget allocation for Doordarshan was Rs. 20 lakh.

18.5.3 *All India Radio*: AIR broadcasts programmes on Health and Family Welfare from all its Stations. The thrust in communication is on promotion of late marriage, parenthood by choice and male responsibility and on birth control as an empowering tool for a developing progressive society. The objective of the programmes has been to help raise the mean age of marriage for women to 20 years; inspiring the two-child family norm; increasing the demand for contraceptives; improving the reproductive health of women; enhancing child survival through spacing; immunization, oral rehydration

therapy and other child development services. AIR also put out programmes on areas beyond family planning, such as countering the male child preference, encouraging male responsibility for family welfare and enhancing the status of women. On an average, the AIR stations broadcast 7,182 programmes every month. AIR stations have also Helped the State Media Officers get copies of suitable programmes for use in the field. AIR continued to broadcast spots on Health & Family Welfare at prime time free of cost. AIR was allocated Rs. 58 lakh for 1990-91.

18.5.4 *Directorate of Advertising & Visual Publicity*: The Dte. of Advertising & Visual Publicity continued to provide media support to the Health & Family Welfare Programmes including maternal and child care. The DAVP produced a booklet on Tubectomy (2.04 lakh) during the year. As a major step up activity on media to control diarrhoeal diseases, 20 lakh copies of a booklet "Better Care during Diarrhoea" (Hindi) was got produced and distributed through DAVP. Another booklet "Beware of Dehydration" (5.25 lakh) was produced in various languages. The DAVP brought out three posters on diarrhoea control management and prevention in all languages. These were distributed through the MMU of this Ministry. A series of cinema slides on ORT, immunization, two child norm and spacing were produced and distributed during the year.

18.5.4 (i) The DAVP developed, designed and put up a revised exhibition on Family Welfare with emphasis on Girl Child and MCH services at the Health & Family Welfare pavilion at Pragati Maidan. The DAVP Field Exhibition Units organised 51 exhibitions in various parts of the country. Two press advertisements on the occasion of World Population Day were also issued by DAVP. Advertisements were also released on Oral Pills. The DAVP brought out plastic folders, stickers and card folders on Mala-



D and arranged radio spots on the AIR commercial channel. DAVP also provided publicity support for World Health Day, No Tobacco Day, Control of AIDS and Malaria. The sanctioned budget for DAVP for 1990-91 was Rs. 157 lakh.

18.5.5. *Films Division*: During the year, the Films Division released 44 quickies/films in Cinema Theatres all over the country. The Films Division supplied 2654 prints upto March, 91. 30 films have been completed. 63 films were at various stages of production. One film was produced by NFDC. The Films Division's sanctioned budget for 1990-91 was Rs. 245 lakh.

18.5.6. *Directorate of Field Publicity*: The Directorate of Field Publicity arranged Film Shows, Song & Drama Programmes. Oral communication and Photo Exhibitions to propagate the theme of Health and Family Welfare. The thrust was on the need to adopt different methods of birth control and spacing and prevention of diseases. The 257 Field Units of the D.F.P. also organised special programmes like baby shows, seminars, symposia, debates quiz contests, essay and elocution contests as part of the population education activities for different audience groups. The Directorate of Field Publicity organised 30,430 film shows, 4,357 song and drama programmes 1,110 special programmes, 28,518 oral communication programmes, 17,491 photo exhibitions and covered about 2,73,76,000 audiences from April 1990 to January, 1991. Its budget allocation for the year was Rs. 83 lakh.

18.5.7. *Song & Drama Division*: Health and Family Welfare is an integral part of the programmes presented by the Song and Drama Division. 600 private registered parties and 35 departmental troupes put up live entertaining programmes through various formats including plays, songs, skits, folk plays, puppets, magic shows, etc. During the year 1990-91 a total of 25,300 shows were organised by the Song & Drama Division. Three Work-

shops at Chandigarh, Bhopal and Guwahati were organised to sensitise artistes on strategies of Health and Family Welfare. The emphasis of the activities was on covering high fertility Districts especially in the States of U.P., M.P. and Rajasthan. The budget allocation for Song & Drama for 1990-91 was Rs. 85 lakh.

18.5.8. *Press Information Bureau*: The Press Information Bureau issued about 150 handouts publicising various activities of the Ministry of Health & Family Welfare. The features released by the PIB included immunization, leprosy control, better health for rural population, Indian Systems of Medicine and the activities of Hindustan Latex Limited, etc. The Regional Offices of the PIB also provided publicity support to the Health & Family Welfare Programmes by organising press visits and issue of press releases. The budget allocation for PIB during 1990-91 was Rs. 2 lakh.

## 18.6 Mass Mailing Unit

18.6.1. The Mass Mailing Unit which comprises Editorial, Art, Printing and Distribution components, provides print material support to overall communication strategy under the Family Welfare Programmes. During the year under report, the Unit continued to prepare, design, print and mail materials for various publicity items for promotion of small family norm.

18.6.2. For projection of various components of the programme, the creative wings i.e. Editorial and Art Studio attempted various press ads. and stickers comprising structured campaign covering right age of marriage, delaying the first pregnancy, spacing the next birth and family limitation after two children, countering male child preference, immunization and general implications of the population problem which were also carried in the departmental journals. To ensure greater child survival, a special campaign was launched to create awareness about the dangers of dehydration



caused by diarrhoea. As part of this campaign, four multi-colour posters and one multi-colour pamphlet were got produced apart from an earlier single-sheeter. Folders on spacing and terminal methods were also prepared and printed.

18.6.3. The two monthly journals, '*Centre Calling*' in English and '*Hamara Ghar*' in Hindi continued to be regularly brought out. The journals devoted special issues on themes of Diarrhoea, Environment, Immunization and SAARC Year of the Girl Child. The Unit also designed and brought out two folders on the pavilion 'For a Better Future', put up as part of the India International Trade Fair, 1990.

18.6.4. The printing press which was partially modernised with UNFPA assistance, was recommissioned to play a greater role in the integrated set-up. The press brought out voluminous and prestigious publications like the Year Book in addition to a host of publications like the Demographic Scenario, Pocket Books of Statistics. It also continued to print the two journals regularly apart from printing posters, speeches and stationery items for the Ministry.

18.6.5. The Distribution Wing has an Address Library of about Five Lakh addresses. Efforts were continued to expand its outreach by inclusion of additional addresses of Urban Centres and additional PHCs. The existing lists were also revised and up-dated. This Wing mailed about 48 lakh copies of various educational, motivational and display materials throughout the country to various audience categories of States/UT Governments including Trade Union Leaders, Voluntary Organisations, Cooperatives, Defence, Railways, P&T, Family Welfare Training Centres, Public Sectors, etc. engaged in the field of promotion of Family Welfare and MCH Programmes.

18.6.6 *Direct Mail Schemes*: Three direct Mailing Schemes continued to function. Nearly 400 letters were received in

response to the TV spots and press advertisements on immunization, right age of marriage and spacing methods and desired literatures, i.e. folders on "These Diseases Kill", "Right Age of Marriage", and booklet on "Your Child by Choice not Chance" were mailed.

18.6.7. *Audience Analysis Work*: Several teams of the Audience Analysis Unit have conducted surveys in the States of Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Delhi to get feedback on receipt, issue and utilisation of printed materials and the 16 MM projectors supplied by this Ministry.

## 18.7 I.E.C. Training Scheme

18.7.1 The Information, Education and Communication Scheme is an ambitious scheme to restructure the working pattern of Health Personnel with supportive training and supervision with the predominant objective of making the health infrastructure at the grass-roots level more responsive to people's needs. It was first launched during November, 1987 in 3 Districts each of M.P., U.P., Bihar and Rajasthan. Activities under this scheme were intensified during the year.

18.7.2. The scheme which seeks to enhance the grass-root level workers' communication skills and raise their credibility in the community was extended to an additional 24 Districts i.e. 6 Districts from each of the States of Madhya Pradesh, Uttar Pradesh, Rajasthan and Bihar. Presently, the scheme is under operation in 36 District (i.e. 9 Districts from each of these States)

18.7.3 Basically this scheme seeks to ensure greater rapport between the Community and Health Workers through inter-personal communication techniques, systematizing the health care delivery system by providing on the job training sessions, introducing Visit Schedules on fixed days of the week being followed by Health Workers in the villages and enlist-



ing community participation with the help of 'Link Persons'. In order to transform these basic parameters into action, regular training sessions on monthly and fortnightly basis were organised at PHC and sector levels by Districts & Block Supervisory-cum-Training Teams.

18.7.4 Need-based problem-solving instructional materials of innovative nature were used for the training of health personnel.

18.7.5 As per reports received, about 80,000 Link Persons were enrolled in 12 Districts till October, 1990. This will go a long way to achieve demand generation and demand satisfaction.

18.7.6 A time bound programme for the constitution of District Supervisory cum Training Teams (DSTTs), PHC/Block level Supervisory cum Training Teams (BSTTs) and organisation of initial training of the members of these teams in 24 additional Districts, is in progress.

18.7.7 An assessment study of the working of IEC Training Scheme during the first phase, was conducted by a faculty member of Administrative Staff College of India, Hyderabad. The findings of the study were examined and discussed in a meeting of State Coordinators, Heads of CTIS/Apex Institute and HFWTCs, so as to improve its implementation further.

18.7.8 A close monitoring of the scheme was done by having field visits, participation in the State Implementation Committee meetings and progress review meetings at Headquarters, besides monthly & quarterly reports sent by the States.

## 18.8 Population Education

18.8.1 Systematic Population Education, both formal and non-formal is one of the important planks of the revised family welfare strategy. In pursuance of the revised strategy—Population Education was introduced in the school education system, adult education programme and higher education system in the country

with UNFPA assistance. A project on Population Education for introduction in the teaching of social studies in vocational training was also launched in July, 1988.

18.8.2 Activities in all the four projects of Population Education in the School System, Adult Education Programme, Higher Education System and Vocational Training were intensified.

18.8.3. Efforts to integrate Population Education related messages in the school curriculum and text books in States were continued through National Council of Educational Research and Training and State Education Cells. Reports of evaluation studies conducted by International Institute of Population Studies (IIPS), Bombay to study the effect of Population Education Programme in Schools on the knowledge and attitudes of students and teachers were received. The findings of the study were examined and implications worked out. Draft proposals for intensifying the Population Education Programme in the VIII Five Year Plan were worked out in the light of the findings of the study and other feed-back information and experiences gained.

18.8.4. Population Education Activities in the Adult Education Programme and Higher Education System introduced in January, 1986, were continued. Activities in these projects with reference to training of teachers, instructors, etc. and development of need based educational and instructional materials were intensified. Activities related to research, experiments and action research including development of bibliographical materials on Population Education were also undertaken.

18.8.5. Under the project related to population education in vocational training, instructional and textual materials on Population Education developed during 1989-90 are being translated into regional languages and Training Programmes for coordinators and instructors are in progress.



## PERFORMANCE



**T**he performance in respect of different family planning methods at national level during the year 1989-90 as compared to 1988-89 as well as in relation to the targets for the year 1989-90 is summarised on next page.

19.1.2 The total number of acceptors of different family Planning methods in 1989-90 reached 26.04 million, an all time high record so far, in any year since the inception of the programme. In 1988-89, the corresponding figure was 24.37 million, Method-wise the number of IUD acceptors went up by 1.8%, conventional contraceptive users by 14.2% and Oral Pill users by 13.4% over last year. However, there was some decline in the case of Sterilisation.

19.1.3 *Performance during 1990-91* (April, 1990 to March, 1991). The table on page

221 summarises the position in regard to family planning achievements during 1990-91 (upto March 1991) as compared to the corresponding period of last year as well as to the proportionate targets for the current year.

### 19.2 Sterilisation Programme

19.2.1 *Performance during 1989-90 as Compared to 1988-89:* During 1989-90, 4.18 million sterilisation operations (provisional figures) were performed as against 4.68 million in 1988-89. The proportion of tubectomy acceptors to sterilisation was 91.8% in 1989-90 as against 86.8% in 1988-89. 16 States/U.Ts. had done better in 1989-90 than in 1988-89.

19.2.2 In relation to targets at all India level, achievement during 1989-90 was 76.7%. Targets were over-reached by



**Targets for 1989-90 and Comparative Performance  
During 1989-90 and 1988-89**

(Figures in millions)

(Ref. Para 19.1.1)

Sl. No.	Methods	Targets	Achievements		%£Change in per- formance in 1989- 90 over 1988-89	%£Achvt. of annual target of 1989-90
		1989-90	1989-90	1988-89*		
1.	Sterilisation	5.45	4.18	4.68	(-)10.6	76.7
	a) Vasectomy	—	0.34	0.62	(-)44.7	—
	b) Tubectomy	—	3.84	4.06	(-)5.4	—
2.	I.U.D.	5.25	4.94	4.85	(+)1.8	94.0
3.	Other methods					
	(Eq. Users)	16.11	16.93	14.84	(+) 14.1	105.1
	a) C.C. Users	14.02	14.19	12.42	(+) 14.2	101.2
	i) Free distribution Scheme	9.17	9.15	8.20	(+)11.5	99.8
	ii) Commercial distribution Scheme	4.85	5.04	4.22	(+)19.3	103.8
	b) Oral Pill Usars	2.09	2.74	2.42	(+)13.4	130.9
	i) Free distribution Scheme	1.59	1.71	1.49	(+)15.1	107.2
	ii) Commercial distribution Scheme	0.50	1.03	0.93	(+)10.8	206.4
Total Acceptores			***26.04	24.37	(+)6.9	

\*Figures provisional.

£Worked out on the basis of absolute figures.

\*\*\*Individual figures may not add to total due to rounding off.

Kerala, Maharashtra, Punjab, Himachal Pradesh, A&N Islands, Arunachal Pradesh, D&N Haveli, Goa, Daman & Diu, Mizoram and Pondicherry. Gujarat, Haryana, Karnataka, Tamil Nadu, Meghalaya, Sikkim, Tripura and Delhi achieved over 75 percent of the target.

proportionate target, the achievement was 70.4% at national level during the period under review. Gujarat, Kerala, Maharashtra, Tamil Nadu, Himachal Pradesh, A&N Islands, Goa, Daman & Diu, Mizoram and Pondicherry achieved more than 90% of the annual target.

19.2.3 *Progress during the year 1990-91 (April 90 to March, 91):* Provisional and incomplete figures for the year 1990-91 show that a total of 4.03 million sterilisation operations were performed during the period under review which were slightly lower by 2.2% over the performance levels of the corresponding period of last year, 1989-90. However, 14 States/UTs showed improvement in performance over the last year. In relation to

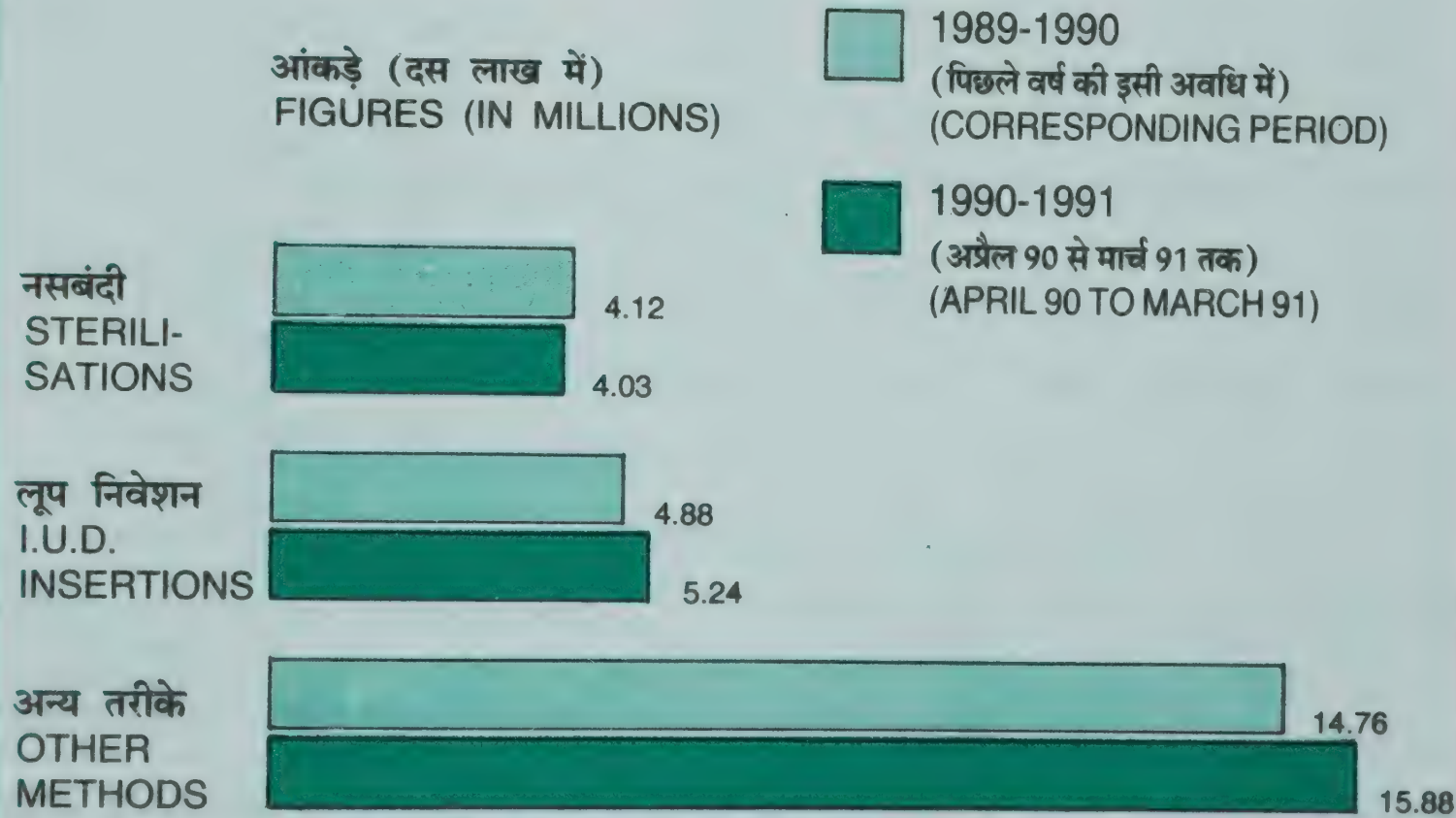
### 19.3 I.U.D. Programme

19.3.1 *Progress during 1989-90 as compared to 1988-89:* During 1989-90, a total of 4.94 million IUD insertions were done as compared to 4.85 million in 1988-89 showing an increase of 1.8%. Of the IUD insertions for which break-up by loop or Cu.-'T' was available, 4.90 million were Cu.-'T' insertions as against 4.78



चालू वर्ष में तथा पिछले वर्ष की इसी अवधि में परिवार  
नियोजन के तरीकों के अंतर्गत किया गया कार्य\*

PERFORMANCE OF F.P. METHODS IN THE  
CURRENT YEAR AND CORRESPONDING  
PERIOD OF LAST YEAR



\*अनन्तिम  
\*PROVISIONAL







# **Target for 1990-91 and Achievements During 1990-91 and 1989-90**

(Ref. Para 19.1.3)

(Figures in million)

Sl. No.	Methods	Prop. target for 1990-91	Achievement£		%* Change in per- formance in 1990- 91 over 1989-90	%* Achvt. of prop. target 1990-91
			1990-91 (April, 90 to March, 91)	1989-90@ (Corres- ponding period)		
1	2	3	4	5	6	7
1.	Sterilisation	5.73	4.03	4.12	(-) 2.2	70.4
2.	IUD Insertions	6.33	5.24	4.88	(+) 7.4	82.7
3.	Other Methods (Eq. users)	17.55	15.88	14.76	(+) 7.6	90.5
	a) C.C. Users (Eq.)	15.06	13.61	12.75	(+) 6.8	90.4
	i) Under Free Distribu- tion Scheme (Eq.)	9.73	9.31	9.07	(+) 2.7	95.7
	ii) Under Commercial Distribu- tion Scheme (Eq.)	5.33**	4.30\$	3.68\$	(+)16.9	80.7\$\$
	b) Oral Pill Users (Eq.)	2.49	2.27	2.01	(+) 13.3	91.2
	i) Under Free Distribu- tion Scheme(Eq.)	1.79	1.91	1.71	(+) 12.2	106.9
	ii) Under Commercial Distribu- tion Scheme (Eq.)	0.70**	0.36\$	0.30\$	(+) 19.4	50.8\$\$
<b>Total Acceptors</b>			<b>25.15</b>	<b>23.76@</b>	<b>(+) 5.9</b>	

£ Figures provisional.

\* Worked out on the basis of absolute figures.

\*\* Annual target

Eq.—Equivalent.

\$ Achievements upto February.

\$\$ Based on annual target.

@ Includes figures of State/UTs upto the period for which the current year performance figures are available.

million in 1988-89 registering an increase of 2.6%. The proportion of Cu. 'T' insertions to total IUD insertions was 99.3% in 1989-90 as compared to 98.5% in 1988-89. In IUD, majority of the States/UTs. had done better in 1989-90 than in 1988-89. Targets were over-reached by Gujarat, Haryana, Kerala, Madhya Pradesh, Punjab, Tamil Nadu, Uttar Pradesh, A&N Islands, Arunachal Pradesh, Goa and Pondicherry. In relation to targets, the achievement at National level was 94.0%.

19.3.2 *Progress during 1990-91 (April, 90 to March, 1991)*: 5.24 million IUD insertions (provisional figures) were done during the year 1990-91 as against 4.88 million during the corresponding period of last year registering an increase of 7.4%.

In relation to target, achievement at national level has been 82.7% of the proportionate target. Punjab, Uttar Pradesh, Sikkim, A & N Islands, D & N Haveli, Goa and Pondicherry achieved more than 100% of the annual target.

## **19.4 Conventional Contraceptives**

19.4.1 *Progress during 1989-90 as compared to 1988-89*: During 1989-90, a total of 1025.53 million pieces of condoms including those under commercial scheme, 65 diaphragms, 52222 Jelly/Cream tubes and 4721 foam tablets were distributed. This works out to 14.19 million C.C. users as against 12.42 million enrolled during 1988-89 thereby registering an increase of 14.2%. All the States/U.Ts. (except Bihar,



Haryana, Karnataka, Tamil Nadu, Chandigarh, Goa and Lakshadweep) showed improvement in 1989-90 over the previous year under free distribution scheme. In relation to targets, the achievement at national level was 101.2% (99.8% of the target for C.C. users was achieved under free distribution scheme and 103.8% under commercial distribution scheme). The States/U.Ts. of Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Himachal Pradesh, Tripura, A&N Islands, Arunachal Pradesh, Goa and Pondicherry exceeded their targets under free distribution scheme.

**19.4.2 Progress during 1990-91 (April, 90 to March 1991):** A total of 136.14 lakh users (provisional figures) of conventional contraceptives were enrolled during the period April, 90 to March, 91 of the year 1990-91. Under the free distribution scheme alone, 93.11 lakh CC users were enrolled during the period under report as against 90.69 lakh in the corresponding period of last year, registering an increase of 2.7%. Achievement at national level under free distribution was 95.7% of the target for the year 1990-91. Gujarat, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Uttar Pradesh, Tripura, A&N Islands, Arunachal Pradesh and Goa achieved over 100% of the annual target.

## 19.5 Oral Pills

**19.5.1 Progress during 1989-90 as Compared to 1988-89:** During 1989-90, a total of 35.62 million oral pill cycles were distributed giving 2.74 million users of oral pills as against 2.42 million in 1988-89 showing an increase of 13.4%. 130.9% of the annual target was achieved during the year.

**19.5.2 Progress during 1990-91 (April, 90 to March 91):** During the year 1990-91, a total of 22.71 lakh users (provisional figures) of oral pills were enrolled in the

country. This figure was higher by 13.3% over the corresponding levels of last year. This achievement comprises 91.2% of the proportionate target for the year 1990-91.

## 19.6 Couples protected

**19.6.1** About 61.47 million couples (43.3 percent of the total eligible couples in the reproductive age group 15-44 years) were effectively protected against conception by one or the other approved Family Planning methods as of 31st March, 1990. Of these, 30.1 percent were protected by sterilisation alone.

**19.6.2** The States/Union Territories of Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, Himachal Pradesh, D&N Haveli and Pondicherry have protected higher percentage of couples than the all India percentage (43.3 percent).

## 19.7 Medical Termination of Pregnancy (MTP)

**19.7.1** In 1989-90, a total of 5.96 lakh terminations (provisional figures) were done as against 5.82 lakh in 1988-89.

**19.7.2** During 1990-91 (upto December, 90) 343,524 terminations (figures provisional) were done as compared to 362,065 in the corresponding period of the last year.

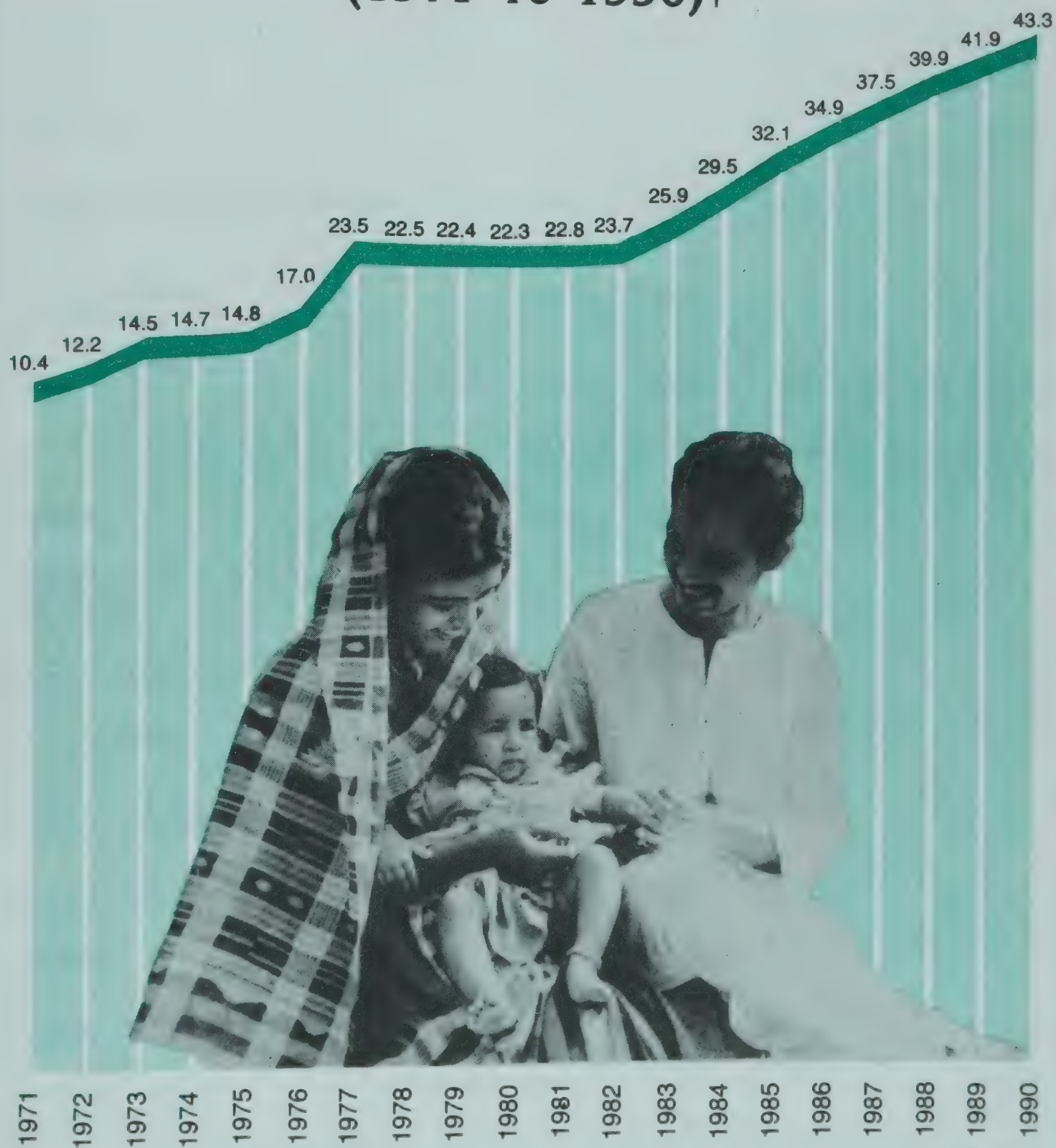
**19.7.3** Since inception of the programme in April, 1972, 7.33 million terminations upto December, 1990 were effected under MTP Act.

## 19.8 Maternal and Child Health Programme

**19.8.1** The figures of performance in respect of immunisation and prophylaxis programmes for the year 1989-90 and 1988-89 are summarised in the table on next page.



परिवार नियोजन कार्यक्रम के अंतर्गत कारगर ढंग से  
सुरक्षित किए गए दम्पति ( 1971 से 1990 )+  
COUPLES EFFECTIVELY PROTECTED  
UNDER FAMILY PLANNING PROGRAMME  
(1971 To 1990)+



+वर्ष की 31 मार्च की स्थिति के अनुसार AS ON 31st MARCH OF THE YEAR

\* अनन्तिम  
\* PROVISIONAL







**Targets under MCH Programme during 1989-90  
and performance during 1989-90 and 1988-89**

(Ref. Para 19.8.1)

(Figures in thousands)

Activity	Target for 1989-90	Achievement		% Increase (+) or Decrease (-) of performance in 1989-90 over 1988-89	% Achvt. of Annual target of 1989-90
		1989-90*	1988-89		
1	2	3	4	5	6
<b>A. Immunisation</b>					
i) Tetanus Immunisation for expectant mothers	25124	17833	16185	(+) 10.2	71.0
ii) DPT Immunisation for Children	19141	19273	16810	(+) 14.7	100.7
iii) Polio	19141	19136	15903	(+) 20.3	100.0
iv) B.C.G.	19141	20461	17438	(+) 17.3	106.9
v) Measles	19141	16008	12430	(+) 28.8	83.6
vi) DT Immunisation for Children	18746	14055	12988	(+) 8.2	75.0
vii) T.T. (10 years)	18076	10429	8286	(+) 25.9	57.7
viii) T.T. (16 years)	17225	7772	5664	(+) 37.2	45.1
<b>B. Prophylaxis against Nutritional anaemia among.</b>					
a) Total Women	22000	19528	21125	(-) 7.6	88.8
b) Children	29890	21746	21674	(+) 0.3	72.8
c) Prophylaxis against blindness due to Vit. 'A' deficiency	29890	37747 (doses)	41603 (doses)	(-) 9.3	68.8K

\* Figures provisional.

% of achievement of target was worked out by taking half of the total doses given to the 1st time initiated, continuing and completed dosed beneficiaries as annual target of Vit. 'A' solution are two dosed beneficiaries.



19.8.2 The performance under MCH programme during 1990-91 (April, 90 to March, 91) is given below:—

**Targets under MCH Programme during 1990-91  
and achievement during 1990-91 and 1989-90**

(Figures in 000's)

Activity	Prop. Target for 1990-91	Achievement*		% Increase(+) Decrease(-) of perfor- mence in 1990-91 as compared to 1989-90)	% Achvt. of Prop target 1990-91
		1990-91 (April, 90 to March,91)	1989-90@ (Corres- ponding period)		
1	2	3	4	5	6
A. Immunisation					
i) Tetanus Immunisation for expectant Mothers	24389	18990	17028	(+) 11.5	77.9
ii) DPT Immunisation for Children	21628	21032	18171	(+) 15.8	97.2
iii) Polio	21628	21182	18110	(+) 17.0	97.9
iv) B.C.G.	21628	21976	19436	(+) 13.1	101.6
v) Measles	21579	19053	14834	(+) 28.4	88.3
vi) DT Immunisation for Children+	13876	11373	11734	(-) 3.1	82.0
vii) T.T. (10 years)+	12549	8598	8521	(+) 0.9	68.5
viii) T.T. (16 years)+	12517	6749	6102	(+) 10.6	5 39
B. Prophylaxis against Nutritional anaemia among	(Annual target)				(% Achvt. of annual target)
a) Total Women+	20576	14295	15485	(-) 7.7	69.5£
b) Children+	34979	17362	17558	(-) 1.1	49.7£
c) Prophylaxis against blindness due to Vit. 'A' deficiency+	29982	28949 (doses)	29738 (doses)	(-) 2.7	46.8K£

\* Figures provisional.

+ Targets and achievement figures relate to April to February.

£ Worked out after excluding targets of those States for which achievement figures have not been received.

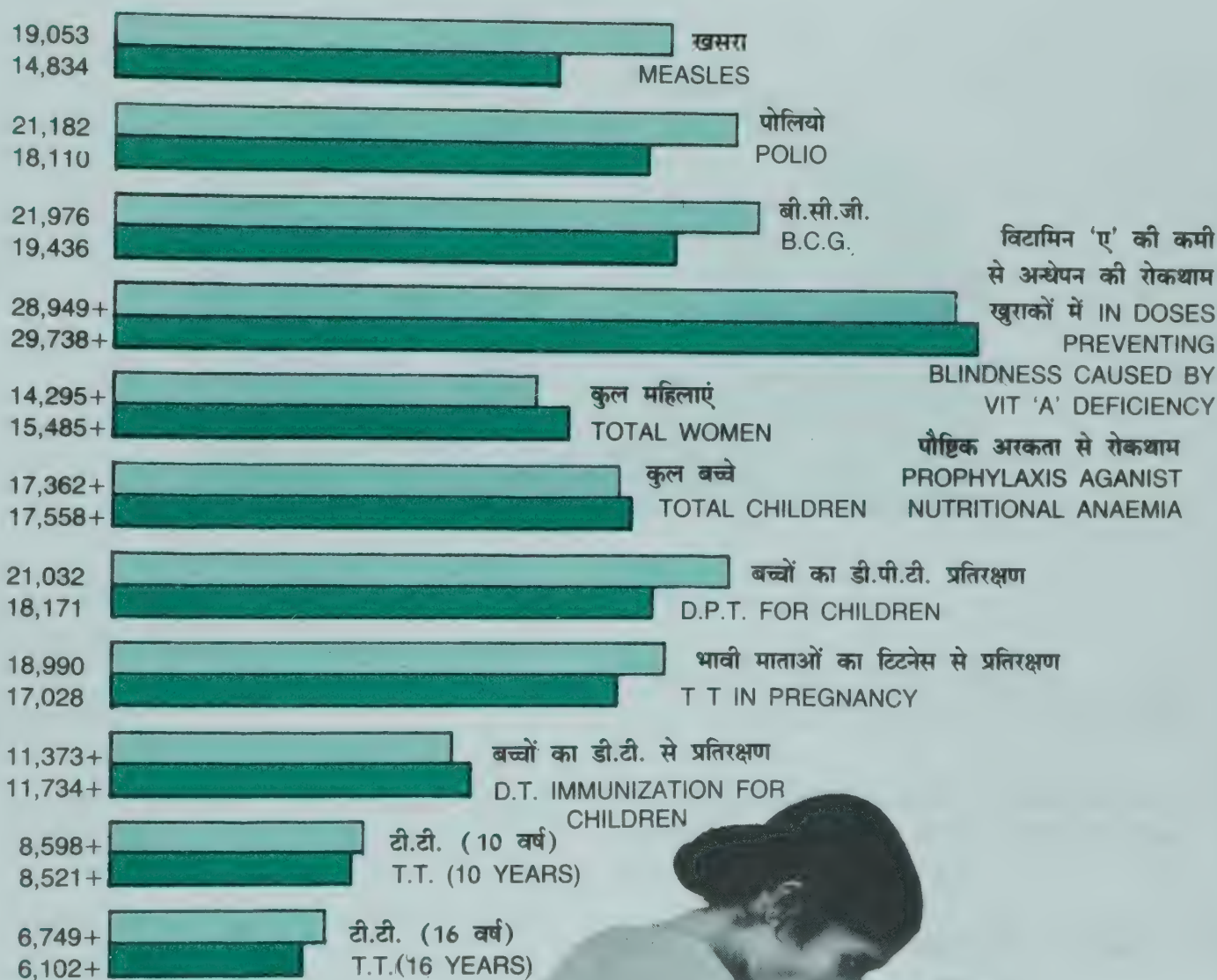
% achievement of target was worked out by taking half of the total doses given to the first time initiated, continuing and completed dosed beneficiaries upto the period under review as the annual target of Vit. 'A' solution are two dosed beneficiaries.

@ Includes figures of States/UTs upto the period for which the current year figures are available.



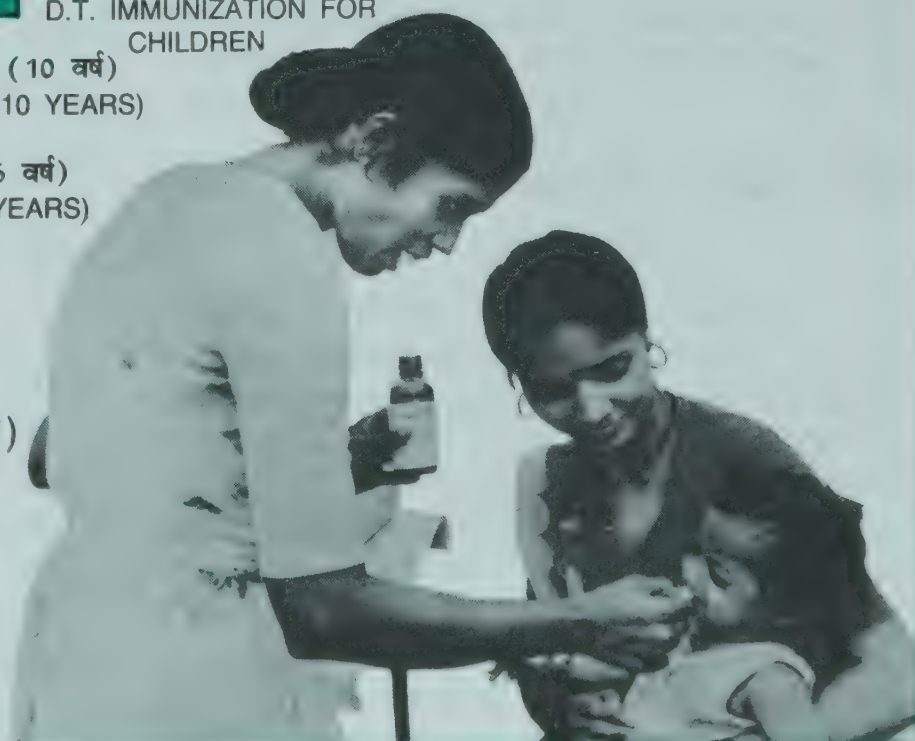
# मातृ एवं शिशु कल्याण कार्यक्रमों के अन्तर्गत 1989-90 एवं 1990-91 में किया गया कार्य\* ACHIEVEMENTS UNDER M.C.H. PROGRAMME DURING THE YEARS 1989 - 90 & 1990 - 91

(आंकड़े हजारों में) (FIGURES IN THOUSANDS)



1990-1991  
(अप्रैल 90 से मार्च 91 तक)  
(APRIL 90 TO MARCH 91)

1989-1990  
(पिछले वर्ष की इसी अवधि में)  
(CORRESPONDING PERIOD)









# INTERNATIONAL ASSISTANCE AND AREA DEVELOPMENT PROJECTS



**A**t present, External Assistance is being received for the Family Welfare Programme from the following International /Bilateral agencies:—

- i) United Nations Population Fund (UNFPA)
- ii) World Health Organisation (WHO)
- iii) United Nations International Children's Fund (UNICEF)
- iv) Norwegian Agency for International Development (NORAD)
- v) Danish International Development Agency (DANIDA)
- vi) Overseas Development Agency (ODA) of U.K.

vii) World Bank

viii) United States Agency for International Development (USAID)

20.1.2. Following are details of such assistance received from / committed by each of these agencies:—

## 20.2 United Nations Population Fund (UNFPA)

20.2.1 UNFPA has been assisting the Government of India since 1974. In the first phase of assistance (1974-78), India received nearly U.S. \$43 million (approx. Rs. 33.6 crore) as assistance for various population activities like training of paramedical workers, dais training programme, opinion leaders' camps etc.

20.2.2 An amount of approximately US\$



18 million (Rs. 15.19 crore) were received during the year 1979 and 1980 the two years that were treated as individual years before the 1981-85 phase of funding commenced.

20.2.3 During the phase 1981-85 an amount of US \$ 59 million (Rs. 65.61 crore) was received. The main projects being Area Project in Rajasthan and Bihar, Supplies of Laparoscopes, Copper Ts., Material for Oral Pills etc., Population education, Computer for IIPS, Bombay etc.

20.2.4 *Third Phase of Assistance 1986-90:* For the phase 1986-90, US \$ 63.00 million (Rs. 81.90 crore approx.) have been earmarked for assistance. During the first year viz. 1986 an assistance of Rs. 10.53 crore (\$8.74 million approx), in 1987 an assistance of Rs. 8.47 crore (\$6.50 million approx.) and in 1988 an assistance of Rs. 15.28 crore (\$9.76 million approx.) and in 1989 an assistance of Rs. 15.31 crore (\$8.44 million approx.) has been received. It is targetted to receive assistance to the tune of approximately equivalent to Rs. 29.70 crore in US Dollars during the year 1990.

20.2.5 UNFPA assistance is utilised for National level schemes under the Family Welfare Programme like Supply of Contraceptives, Population education, Opinion leaders camps, Organised sector projects, Service support etc. During the Second phase, however, an important component was the two Area Development Projects in all districts of Bihar and 4 districts of Rajasthan under which focus was on strengthening supplies and services. During the current phase of assistance, UNFPA would be providing assistance for Population Education, Area Projects, Supply of Contraceptives, Indigenous Production of CuTs, Strengthening of Mass Media Mailing Unit, Establishment of Micro Surgery Recanalisation and Training Centres and for Organised Sector etc.

## 20.3 World Health Organisation (WHO)

20.3.1 In addition to small amount of assistance for Research under the "Human Reproduction Programme," WHO assistance has also been available for a number of fellowships, supplies and equipments, group educational programmes and selected studies. Quantitatively, WHO assistance to the Family Welfare Sector has not been significant. In the biennium 1984-85 an assistance of Rs. 136.98 lakh had been provided by WHO. For the biennium 1986-87, the assistance from WHO was of the order of Rs. 149.94 lakh for activities in the Family Welfare Sector. For the biennium 1988-89, Rs. 266.81 lakh were utilized for activities relating to MCH and EPI Programme under Family Welfare Sector. For the biennium 1990-91, Rs.1.37 crore (\$ 761,400) have been kept.

## 20.4 United Nations International Children's Fund (UNICEF)

20.4.1 The UNICEF has been assisting us in the MCH and EPI programmes. The assistance has been received in the form of Supplies and equipments for medical colleges, paediatric units of districts and sub-district hospitals, Urban FP & MCH Centres. The assistance has also been provided for in-service training of PHC Medical Officers in MCH & F.P.

20.4.2 The Expanded Programme on Immunization (EPI) was started in 1978 with objectives to reduce morbidity and mortality due to diphtheria, whooping cough, tetanus, poliomyelitis, Tuberculosis and Typhoid fever. Measles Control Programme has been included in 1985. UNICEF has been assisting this programme by supplying vehicles, syringes / needles, health education, publicity materials and vaccines etc. It was aimed to achieve Universal Immunization in the country by the year 1990. Districts have been selected which have the capacity of achieving Universal level of coverage earlier and maintaining high levels subsequently. 31 such



districts were selected in 1985-86, 62 new districts were added in 1986-87 and 90 such districts were earmarked in 1987-88, 120 districts in 1988-89 and 135 districts in 1989-90.

20.4.3 UNICEF assistance during 1985-86 was to the tune of Rs. 720 lakh, in 1986-87 — it was Rs. 1843.51 lakh. During 1987-88, we have received Rs. 1595.44 lakh as assistance from UNICEF. In 1988-89 this assistance was Rs. 2229.50 lakh and in 1989-90 - Rs. 2167.69 lakh.

#### **20.5 Norwegian Agency for International Development (NORAD)**

20.5.1 Royal Government of Norway have been providing partial financial support for implementation of Post-partum Programme in Urban and Semi-Urban areas of the country under two projects viz. Family Welfare Project-I at district level and Family Welfare Project - II at sub-district/taluka level centres. The quantum of financial assistance to the tune of 268.50 million N.Kr. (equivalent to Rs. 41.62 crore approximately) had been provided by NORAD upto 31.12.1985 for Project-I. Thereafter; the financial assistance for this project was discontinued.

20.5.2 At present NORAD assistance is being provided for All India Hospitals Post-Partum Programme at sub-district level Hospitals-II since 1980 which envisages extension of Post-Partum Programme to Taluka/Sub-Divisional level Hospitals to utilize existing resources for the improvement of the Health status of mothers and children in semi-urban and rural areas of the country. This project is upto December 1990. Norway will provide 215 million N.Kr. for this project. Upto December 1989, 155.5 million N.Kr. (approx. Rs. 24.19 crore) have been obtained as reimbursement from NORAD.

#### **20.6 Danish International Development Agency (DANIDA)**

20.6.1 Eight districts of Madhya Pradesh and two districts of Tamil Nadu were taken up for expansion and improvement of rural services delivery infrastructure with partial assistance from DANIDA. The Area Projects launched on 1.11.81 ended on 31.3.88. An expenditure of Rs. 25.77 crore on Madhya Pradesh projects and Rs. 20.24 crore on Tamil Nadu Project had been incurred.

20.6.2 The phase-II of the projects has commenced from 1.4.89. The project in Madhya Pradesh will be implemented for three years 1989-91 in 8 districts of Madhya Pradesh at a total project cost of Rs. 15.41 crore. The project approved for Tamil Nadu will be implemented in two districts and will be for a period of 3 years (1989-91) at a project cost of Rs. 16.26 crore.

20.6.3 The focus during IIInd Phase would be on balanced and integrated health services delivery, strengthening of the activities identified as being of importance such as maternal, child health and immunization. The functioning of the health Sub-centres, Primary Health Centres and Community Health Centres will be strengthened and other activities such as in-service training of medical and para-medical staff, information, education and communication supervision etc. will be undertaken under the project.

#### **20.7 Overseas Development Agency (ODA)**

20.7.1 An Area Development Project under Health and Family Welfare Programme was implemented in the five districts of Cuttack, Puri, Ganjam, Kalahandi and Phulbani in Orissa with the assistance of ODA (UK). The first phase of the Project started in 1980-81 and came to a close on 31.3.87 at a total project cost of Rs. 33.67 crore. The main activities of the project were creation of infrastructural



facilities for delivery of Health and Family Welfare Services, development of trained manpower and promotion of IEC activities. During the project period, a total of 1832 buildings were constructed, and 14604 personnel of various categories were imparted training. Phase-II Area Development Programme to consolidate gains achieved in the first phase and to cover 5 more districts in Orissa started on 1.11.89 for the period 1989-94 at a cost of Rs. 65.66 crore.

## 20.8 World Bank

20.8.1 The World Bank assistance is in the field of Area Projects and Training Projects.

20.8.2 Area Projects were taken up initially in all districts of U.P. and Karnataka under IPP-I during the period from 1973 to March, 1989.

20.8.3 Subsequently the Projects were taken up in the States of Andhra Pradesh and Uttar Pradesh from 1st April, 1980 (IPP-II). IPP-II was to end on 31.3.86 but it was extended upto 31.3.88. The total project cost including that of the extended phase was Rs. 31.40 crore for Andhra Pradesh and Rs. 73.33 crore for Uttar Pradesh.

20.8.4 Three more States were thereafter added — Karnataka and Kerala from 1st April, 1984 under IPP-III and West Bengal from 1st September, 1985 under IPP-IV. The ultimate objectives of the projects are: (i) to improve Health and Family Welfare Infrastructure in the areas covered; (ii) to reduce fertility and (iii) reduce maternal and child mortality and morbidity.

## 20.9 IPP-V Strengthening of Primary Health Care, F.W. Services in Urban Slums of Bombay and Madras

20.9.1 The World Bank will be providing assistance for the India Population Project-V for strengthening the Primary

Health Care and Family Welfare Services in the metropolitan cities of Bombay, Madras, Calcutta and Delhi. The cities of Bombay and Madras will be taken up in the first phase. The project has been launched during 1988-89. The project with a cost of Rs. 48.30 crore for Bombay and Rs. 69.10 crore for Madras will be in operation for 7 years with World Bank support of 60% of the project cost.

## 20.10 IPP-VI—Training and Service Delivery Enhancement

20.10.1 A National Training and Service Delivery Enhancement Project has been developed, which aims at developing training infrastructure and a system which will ensure that the health personnel are competently trained in the areas of programme priorities. World Bank is providing assistance for this Project. It is proposed to cover all the States in phases under the project. In the First phase, the States of Uttar Pradesh, Madhya Pradesh and Andhra Pradesh are covered. The first phase will cost around Rs. 199.77 crore. It is for the period 1990-95.

## 20.11 IPP-VII Training Project

20.11.1 The IPP-VII Training Project is proposed to be implemented in the five States of Bihar, Gujarat, Punjab, Haryana and Jammu and Kashmir at a total project cost of Rs. 335.72 crore. The project also includes National components for Social Marketing of Contraceptives and Involvement of Voluntary Organisations. This project has been approved by Government on 2.11.90.

20.11.2 The World Bank assistance during the year 1985-86 was Rs. 18.07 crore, in 1986-87 Rs. 17.75 crore, in 1987-88 Rs. 26.16 crore in 1988-89 Rs. 13.87 crore and in 1989-90 Rs. 141.71 crore.

## 20.12 United States Agency For International Development (USAID)

20.12.1. A grant of assistance of \$40



million was committed to be received from USAID for an Area Project taken up in fourteen (14) selected districts in five States of Maharashtra, Gujarat, Haryana, Punjab and Himachal Pradesh. The Project was started in August, 1980 and came to a close in December, 1986.

20.12.2 An agreement was signed with USAID in August, 1983 for an assistance of \$47 million (Rs. 47 crore) over 7 years (1983-90) for establishing a Contraceptives Marketing Organisation to increase coverage of eligible couples in the country under various spacing methods. This project consisted of the following components:—

- (i) Establishment of Contraceptive Marketing Organisation—a society under the Societies Registration Act, 1860.
- (ii) I.E.C. Component-Improvement; and
- (iii) Demographic Analysis and Development studies to be carried out by Registrar General.

20.12.3 As USAID has de-obligated the loan portion of the assistance, it was decided to close the issue of establishing a CMO. However, the component of Demographic Analysis and improvement of IEC component are being implemented.

20.12.4 USAID has also been providing assistance for P.V.O.H. programme of the Ministry. The agreement for this programme costing \$20 million was signed on 31.8.81. The project has expired on 30.9.90. Under this project financial assistance was provided to Voluntary Organisations in the country for expansion and improvement of basic health, special preventive health, family welfare and nutrition services in rural areas and urban slums.

20.12.5 Small amount of assistance is also available for participation of Indian professionals in training workshops/seminars abroad and commodity assistance.

20.12.6 The USAID would further provide assistance of US \$65 million to India for Child Survival project which includes Universal Immunization and Oral Rehydration Therapy Programmes. The Programme focuses on a limited set of key interventions which can reduce infant and child mortality for which proven technology is available.

20.12.7 The USAID assistance during 1985-86 was Rs. 11.03 crore, in 1986-87 Rs. 11.23 crore, in 1987-88 Rs. 13.29 crore in 1988-89 Rs. 9.26 crore and in 1989-90 Rs. 21.95 crore.



## AUTONOMOUS BODIES AND SUBORDINATE ORGANISATIONS



**T**he Ministry of Health and Family Welfare draws technical and research support from its numerous Autonomous/Statutory Bodies located at various places in the country. This Ministry also directly operates various Subordinate Offices and public sector undertakings. Progress of work of these organisations during the year 1990-91 is discussed in this Chapter.

### 21.2 National Institute of Health and Family Welfare, New Delhi

21.2.1 The National Institute of Health and Family Welfare serves as an apex technical institution for the promotion of health and family welfare in the country through its education and training, research and evaluation, advisory, consultancy and other specialised services.

21.2.2 In all its activities, the Institute

has adopted projectised approach to promote multi and inter-disciplinary functioning so as to strengthen the implementation of the two major goals of National Health Policy. As usual, the activities of the year were carried out under ten major functional groups as followed during 1989-90. These functional groups are, viz. (i) Priority Population Group; (ii) Policy and Strategic Planning Group; (iii) Health Systems Development; (iv) Voluntary Sector; (v) Monitoring and Evaluation Group; (vi) Information, Education and Communication Group; (vii) Population Stabilization Group; and (viii) Contraceptive Technology Development Group.

21.2.3 *Education and Training:* With reference to basic education, the Institute has been recognised for a three year M.D. (CHA) by the University of Delhi. Twenty



students attended this course, 10 in the first year and 10 in the second year. In case of Ph.D. Programme, the faculty members continued guiding 14 students who are registered with different universities.

21.2.3 (i) The education and training activities of the Institute have been integrated with the on-going health and family welfare programmes. The training programmes are need-based and relevant to the programme commitments aiming at solving the problems and thereby improving the effectiveness of health and family welfare programmes. As the success of health and family welfare programme is dependent on application of appropriate technology, availability of resources and effective utilisation of manpower, the Institute has been engaged in producing such manpower who could take up the challenge of the future.

21.2.3 (ii) *The training courses planned for 1990-91 included among others:* Orientation Training Programme for DEMOs; IEC training for U.P. (Intra and extra-mural); Hormone Assays and Clinical Application; Research Methodology in RBM; Prevention of Food Adulteration Course; Logistics Supplies & Materials Management; Management Training for Municipal Health Officers; Hospital Administration; Health Planning; Health Systems Research; Management Training for Medical College Faculty; Staff College Course; Nursing Management; Education Technology; and UIP Courses.

21.2.4 *Workshops/Seminars (Intra-mural) organised during the year were:* Population Information Network; Health Economics; and Role of HFA Leadership Development.

21.2.4 (i) *The Extra-Mural Workshops/Courses were:* UIP courses; District Health Planning; Incorporation of Population and F.W. Messages; Strengthening

of Tribal Research; Team Building at PHC/CHC; and Courses for Statistical Officers.

21.2.4 (ii) *Commonwealth Workshop:* A Commonwealth Workshop on Production, Dissemination and Use of Community Health Materials, especially for women, was held from June 25 to 29, 1990. It was hosted by the Government of India.

21.2.4 (iii) (a) The objectives of the Workshop were — (i) to review the existing community health education materials, especially those for women; (ii) to examine processes for material development; (iii) to explore ways of using materials in the field; and (iv) to recommend follow-up action by the Commonwealth Secretariat and other International Organisations.

21.2.4 (iv) (b) The Workshop was attended by 14 participants mainly from Health, Education, Youth, Social Welfare and Women's Welfare, who hailed from different Commonwealth countries. The broad areas covered in the workshop included baseline survey, defining content of materials, planning for the implementation of the programme, selecting channels of communication, writing, designing and development of materials, distribution and monitoring, use of materials in the community, evaluation and training of personnel etc.

21.2.4 (v) *Asia Pacific POPIN Consultation Workshop:* This Workshop, co-sponsored by the Population Division of ESCAP and NIHF, was held in the Institute from 29th September to 4th October, 1990. It focussed mainly on two areas — (i) examination of ways and means to improve overall awareness of population issues through intra and inter-country networking, and (ii) the prospects of using electronic information technology for processing and



disseminating population data and information for electronic networking.

21.2.4 (vi) (a) The Consultative Workshop developed a plan of coordinated action at the regional level collectively as Members of Asia Pacific POPIN region for the 4th Asia Pacific POPIN Conference to be held at Jakarta in 1991.

21.2.4 (vi) (b) The Workshop was attended by the participants from Afghanistan, Bangladesh, China, Fiji, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Republic of Korea, Thailand and Vietnam.

21.2.5 *Research and Evaluation*: The research activities of the Institute are governed by the commitments and adherence to the National Health Policy and Goals, i.e. Health for All by 2000 A.D. and Achievement of NRR of Unity through primary health care approach. The research studies conducted by the Institute cover diverse areas which are directly or indirectly related to the promotion of health and family welfare programmes in the country and may be classified under five major categories: (i) Health Services Research; (ii) Bio-social Research; (iii) Bio-medical Research; (iv) Population Genetics Research; and (v) Evaluation Research.

21.2.5(i) *Health Services Research*: The research studies in this particular area are geared to generate information which has direct or indirect usage in planning, organization and management of health and family welfare programme. The completed studies include:

- (I) Population Simulation Project;
- (II) National Review of Immunisation Programme;
- (III) Cost Analysis of Universal Immunisation Programme at District level,
- (IV) A Study of Health Services Delivery System in a District; and
- (V) Assessment of Family Welfare/ Primary Health Care needs in Urban Slums.

21.2.5 (ii) The on-going studies include:

- (I) Multi-centric project on Inter-sectoral coordination for Primary Health Care;
- (II) Involvement of Non-governmental organisations in Health and Family Welfare Programmes in India;
- (III) Strengthening Management Training for the Delivery of Primary Health Care in India;
- (IV) Cost variations and cost-effectiveness of Family Welfare and MCH Programme with Special Reference to Universal Immunisation Programme in different States of India;
- (V) Financing of Health Care Services in non-State Sector in India — An Exploratory Cost Study; and
- (VI) Development of Norms of Equipment for Hospitals of different sizes.

21.2.5 (iii) *Bio-social Research*: Keeping in view the social, psychological, cultural, ethnic diversity of Indian Population Groups characterised by their individualistic attitudes towards the Government health care infrastructure, the Institute undertakes studies to elucidate the mechanism of decision making processes, behavioural patterns at community and individual levels. Two studies viz. (i) A Diagnostic Study of Factors Responsible for less or no utilisation of Health facilities among the Bhills of M.P.; and (ii) A study on Popularity of Spacing Methods in Indian Family Welfare Programme have already been completed. The remaining ten studies are at various stages of execution. They include: (i) A Study to Identify Problems and Patterns of Acceptability and Utilisation of Health Care Services by Scheduled Caste Population in Rural Areas; (ii) Multi-centric Study on Community Participation (Four Studies); (iii) Development of Indicators for Gauging the Extent of community participation; (iv) Perception of sickness and extent of Community Participation; (v) Perception of sickness and Health factors responsible for acceptability pattern



and performance of health services among tribals of Mandla District of M.P.; and (vi) Involvement of community institutions for the promotion of personal and general health care among school going children.

21.2.5 (iv) *Bio-Medical Research*: The studies in this area are mainly directed towards development of newer contraceptive technology; development of diagnostic procedure compatible to the needs of the national health and family welfare programme. Besides, studies on understanding the physiological and hormonal variabilities of the reproductive processes are being carried out.

21.2.5 (v) (a) *The important studies which are in progress under this area include*: Development of Immunodiagnostic Kits; Low Cost Rapid Pregnancy Test; Identification of Fertility Related Sperm Antigens; Collaborative Project on Active Immunisation with Ovine FSH as means of rendering adult human male infertile feasibility study in bonnet monkeys; The effect of steroidal and non-steroidal anti-androgens on reproductive functions of male rats; Phase-I human clinical trial with three anti-hCg, vaccines—A Multicentric study under Department of Science and Technology; Identification and characterisation of ovarian inhibitors and their potential application as fertility regulating agents; Development of enzyme immuno-assays for hormones and their clinical application; and Development of anti-bodies against human uterine progesterone and estrogen receptors and their potential application as anti-implantation agents; Studies on ovum transport, implantation and conceptus; and Maintenance with the object of developing anti-implantation agents and chemical abortifacients.

21.2.5 (v) (b) *Population Genetics Research*: Diversity of the population groups of India with respect to their social, cultural, ethnic variability, religious practices calls for deeper understanding to

elucidate the biological correlates of the disease patterns. The tribal population groups living in difficult, inaccessible terrains provide for a readymade laboratory situation to understand the impact of genetical and environmental correlates on the health status. Occurrence of genetic disorders and social sanction of in-breeding in various population groups are some of the facets of population genetics research being pursued at the Institute.

- (i) Epidemiological Investigation of Haemoglobinopathies and Allied Disorders, Nutrition and Physical Growth Trends, Health Profile, Health Seeking Behaviour and Environmental Correlates for promotion of health care among tribal groups of Baster District, M.P., has been completed.

The other two studies at various stages of execution are:-

- (a) Genetic and Socio-cultural Determinants of Kutia-Kondhs of Phulbani District, Orissa; and
- (b) Genetic Epidemiology of Congenital Malformations.

21.2.5 (vi) *Evaluation Research*: The evaluation studies conducted in this Institute aim at developing tools, techniques and methodology for evaluating the ongoing programmes of health and family welfare in the country. These studies also give scientific feed-back to the programme managers. Two studies viz. (i) Evaluation of the Status of Basic Training Schools for Health Workers (Male & Female) and their Supervisors in the country; and (ii) Training Need Assessment of Health Personnel in U.P. have been completed. The remaining two studies, namely: (i) Monitoring and Evaluation of Private Voluntary Organisations for Health; and (ii) Training in Family Welfare in Medical Colleges of India are going on.

21.2.6 *Area of Expansion of Activities*:



The Institute has further strengthened activities in certain areas like continuing education for health and family welfare management training through distance learning, health economics, health for all leadership development and communication activities.

21.2.6 (i) *The Consortium of Institutions for Health Management*: Health consortium meetings are usually held to take up the policy issues with respect to various research studies to be carried out in the area of Health Management, Health Economics, HFA Leadership Development, etc. Although this consortium had been in existence for the last about 8-9 years, its scope has been further enhanced during the years.

21.2.6 (i) (a) The Institutions which represent the consortium include Indian Institute of Management, Ahmedabad, Bangalore, Calcutta and Lucknow, Administrative Training Institute, Shimla and Mysore; All India Institute of Hygiene & P.H., Calcutta; Institute of Management in Government, Trivandrum; HC Mathur Institute of Public Administration, Jaipur; Population Centre, Lucknow; National Institute of Rural Development, Hyderabad; Gandhigram Institute of Rural Health & F.W. Trust, Tamil Nadu; Family Welfare Training & Research Centre, Bombay; Health & F.W. Training & Research Centre, Shimla; National Institute of Public Cooperation & Child Development, New Delhi; Indian Institute of Public Administration, New Delhi; Institute of Health Management, Pachod, (Maharashtra); and Indian Institute of Education, Pune. National Institute of Health and Family Welfare, New Delhi has been coordinating.

21.2.6 (i) (b) The collaborative efforts under the consortium have now advanced. Currently the emphasis has been laid on promoting bilateral collaborative activities and also to undertake multi-centric studies.

21.2.6 (i) (c) Some of the major activities are as follows:-

1. *Continuing Education for Health and Family Welfare Management Training through Distance Learning*

The need for developing managerial skills at the district level has been well recognised. There has been a system of in-house training for the purpose. But, it has been the experience of trainers that turn over of participants to training institutions was not satisfactory. Further, it was also realised that the efforts were not adequate and uniform. Therefore, standardisation of such training was thought of to improve the quality of training.

A series of Management Modules for District Health Administration for trainer's use have already been developed and circulated. Despite, there is a further need to extend the training programme on larger scale to meet the requirements of the country. Therefore, it was considered that distance education could be a solution to the problem and more suitable approach to serve the nation-wide requirements.

With active collaboration of Indian Institutes of Management at Ahmedabad, Bangalore, Calcutta and Lucknow, Gandhigram Institute of Rural Health and Family Welfare Trust, Family Welfare Research and Training Centre, Bombay, National Institute of Rural Development, Hyderabad, Harishchandra Mathur Rajasthan Institute of Public Administration, Jaipur, Institute of Management in Government, Trivandrum, Population Centre, Lucknow, the National Institute of Health and Family Welfare, New Delhi, is engaged in preparation of modules to promote and maintain self improvement



through self learning. The total number of modules is 15.

## 2. *Health Economics*

This Institute is attempting to develop Health Economics as one of the important areas of work.

The studies completed so far have been on cost of medical education and costing profile of Primary Health Centres. Other studies currently in progress are on financing of health care in non-State sector, Teaching and Training need Assessment in Health Economics, cost variations in Family Planning Programme etc.

Also activities related to networking of different institutions in the area of Health Economics have been brought under the purview of consortium in the Institute.

Recently a Workshop on Teaching, Research and Information base in Health Economics was organised in this Institute with WHO Assistance where detailed strategy for development and promotion of Health Economics was prepared. This Institute has also contributed by way of its Director being the co-Chairman of Eighth Five Year Plan Working Group appointed by Planning Commission for formulation of Eighth Five Year Plan for Financing and Management of Health Care in future.

## 3. *Health for All Leadership Development*

India has accepted the goal of achieving Health for All through Primary Health Care Approach by 2000 A.D. Increasing emphasis is being given to the development of infrastructure in the rural, urban and tribal areas both in terms of physical facilities as well as manpower development. Evaluation of the progress of Primary Health Care in different countries by WHO showed the need to

narrow the gap between the adopted health policy, goals and the actions. One of the key factors would be to develop a clear understanding of goals of Health for All policy issues, strategies and their implementation, particularly for those who are in leadership position. There is a need to orient health policy makers, health planners and people involved in provision of health care, both within the Government as well as in non-Governmental organisations to the needs of primary health care. The NIHFV has taken a lead in this direction.

## 4. *Communication Activities*

The Institute has proposed to undertake certain communication activities like (i) research studies, namely, (a) to assess the communication activities in a PHC in Haryana State and (b) Effective Utilization of Health Communication as a support mechanism in Health and Family Welfare Programme in a District; (ii) Training and Research in the use of new technology viz. TV and VCR for promotion of health and family welfare programmes; (iii) Production of training manuals, guides, modules and specific aids for other institutes; and (iv) Development of software through various media which could be used for motivational purposes.

21.2.7 *Consultancy Services*: The National Institute of Health and Family Welfare is well known for its consultancy and advisory services in the country. Various national and international agencies engaged in the implementation of health and family welfare programmes in the country are often guided by the experts of the Institute, particularly in regard to—(i) project formulation; (ii) improvement of programme performance; (iii) determination of staffing norms; (iv) diagnostic studies; (v) organizational development; and (vi) solutions for various problems.



21.2.7 (i) *Formulation of Eighth Five Year Plan*: The faculty members of the Institute worked as experts in different working groups set up by the Planning Commission for preparation of the Eighth Five Year Plan proposals in the areas of health and family welfare.

#### 21.2.8 *Specialised Services*

21.2.8 (i) *Reproductive Health Care Services*: The Institute has an advanced centre in reproductive health care particularly in the field of infertility, endocrinology and other reproductive disorders. Besides, the family planning diagnostic and therapeutic surgical procedures in case of infertility are also being carried out. In addition, Recanalisation micro-surgery and vas epididymal anastomosis were being carried out in specific cases.

21.2.8 (ii) *Genetic Counselling Services*: The Institute provides genetic counselling service to the patients referred to by various hospitals of Delhi.

21.2.8 (iii) *National Documentation Centre (NDC)*: The National Documentation Centre of the Institute is one of the pioneering centres actively engaged in documentation activities in the field of health and family welfare. NDC undertakes the selective dissemination of information, preparation of bibliographies and cumulative indexes, newspapers clipping services, etc. The NDC houses a library having a large collection of selected books and caters to the needs of trainees of various courses, staff and students of the Institute.

21.2.9 *Publications*: As part of the continuing education programme to apprise administrators, policy makers and researchers of the latest development in the field of health and family welfare, the Institute publishes and distributes technical research reports from time to time which include Technical Report Series,

Workshop Report Series, National Health Programme Series, Status Paper Series etc.

### 21.3 **Hindustan Latex Limited**

21.3.1 Hindustan Latex Limited, Trivandrum, a Public Sector Undertaking engaged in the production of rubber condoms was incorporated on 1st March, 1966. The first plant for the manufacture of 'NIRODH' (Rubber Condoms) was set up at Trivandrum in 1967 with Japanese collaboration. The Plant commenced commercial production in July, 1969 with installed capacity of 144 million pieces per annum. The second plant was set up in 1977 with an additional capacity of 144 million pieces per annum.

21.3.1 (a) Under its expansion scheme, the Company has since set up two additional plants—one at Trivandrum and other at Kanagala, Belgaum District in Karnataka. These two new Units are designed to manufacture coloured condoms of thinner variety of 0.03 to 0.04 mm thickness. With the addition of these two new plants, the installed capacity of the Company is now 608 million pieces per annum; thus making it the largest manufacturing unit of condoms in India.

21.3.2 *Capital Structure*: The authorised share capital of the company is Rs. 1350 lakh. The issued, subscribed and paid up capital of the Company was Rs. 1257.50 lakh as on 31.3.90. During the year, there was no increase in paid up capital. The Company has repaid loan instalment to Government amounting to Rs. 117.75 lakh during the year. The loan outstanding as on 31.3.90 was Rs. 1136.64 lakh.

21.3.3 *Plant Performance (Production and Sales)*: The total saleable production of condoms for the year 1989-90 was



589.40 million pieces. The capacity utilisation achieved in the various Plants are as follow:—

- |                           |         |
|---------------------------|---------|
| 1. New Plant, Trivandrum: | 95.76%  |
| 2. Old Plant, Trivandrum: | 108.35% |
| 3. New Plant, Belgaum:    | 101.96% |

21.3.3 (i) The total sales achieved in the year comes to 576.3816 million pieces valued at Rs. 2482 lakh under different schemes of the Department of Family Welfare (Government of India) and internal sales of own brand of condoms namely *Moods, Free Supply Commercial Supply 3's, Commercial Supply, 1/2 Gross Jar, Deluxe, Super Deluxe, Sawan, Masti and Bliss*.

21.3.4 *Awards*: The Company has received Excellent Performance National Award for 1987-88 from Department of Public Enterprises. The Company has also secured the following awards:—

1. Indira Gandhi Memorial Award for Excellent Public Sector Undertaking and Excellent Chief Executive for 1987-88.
2. Productivity Award instituted by the Kerala State Productivity Council for 1987-88.
3. Quality Award instituted by the National Institute for Quality and Reliability.
4. Certificate for effective pollution control measures from Kerala State Pollution Control Board.
5. Safety Awards—Instituted by the National Safety Council (Kerala Chapter).
6. National Award for the best employer of Handicapped.
7. HLL's MOODS T.V. Commercial Award from the Madras Advertising Club.

8. Communication Arts Guild Award for the presentation of Annual Report for 1989.

21.3.5 *Research and Development*: The Company is vigorously following the policy (reported last year) of involving leading research institutions such as Regional Research Laboratory, Trivandrum, IIT, Kharagpur etc. A new unit of R&D is being set up to study various technological aspects concerning latex and quality of condoms. The solid state memory system in Inspection Section developed by expert engineers in HLL is a major achievement in the field. The Research Work in electronic testing has also been undertaken with financial assistance from Department of Electronics.

21.3.5 (i) The other Research and Development work in ultrasonic vulcanisation, automatic JIS tester machine, automatic burst volume tester and latex level controller are completed. The work on spermicidal condoms has been completed and the Company has brought out new brands of condoms in open market under the brand name 'RAKSHAK' and 'SHARE'.

21.3.5 (ii) During the year, modernisation (1st phase) for the old plant at Peroorkada, Trivandrum has been completed. The work on Transfer of Technology to M/ Ploar Latex Limited, Balasore, Orissa State and other items of work on diversification projects have also been undertaken.

21.3.6 *Diversification Projects: Cu.T*. The Ministry of Health and Family Welfare has cleared the Cu-T Project involving a capital outlay of Rs. 493.40 lakh with substantial financial assistance from UNFPA. Civil construction work has already been started at Akkulam in Trivandrum District, where the Kerala Government has allotted the land free of cost. This Project is expected to be completed within 18 months and will support the National Family Welfare Programme.



21.3.6 (i) *Surgical Gloves and Examination Gloves Project*: This Project involving a capital cost of Rs. 192 lakh is proposed to be started with assistance from SBI Capital Markets Limited in the form of lease finance to the extent of Rs. 150 lakh. The production would commence in the new plant in 1990-91. The Company has adequate enquiries/orders and tie-up arrangements for exports.

21.3.6 (ii) *Blood-Bags*: In collaboration with M/s National Research and Development Corporation, the Company proposes to start a Plant for the manufacturing of Blood Bags, Blood Oxygenator Soft Shell and Cardiotomy Reservoir Soft Shell. This Project has a capital outlay of Rs. 359 lakh.

21.3.6 (iii) *Disposable Syringes and Needles*: The Company has ambitious plan of setting up a Disposable Syringes and Needles project with a capital outlay of Rs. 25 crores, a detailed Project Report has been submitted on the basis of recommendation of the Board of Directors and technical team deputed abroad by Government of India to identify the latest technology.

21.3.6 (iv) *I.V. Fluid Project*: The Company has taken up consultancy for a project for setting up a plant for manufacture of I.V. fluid for Kerala Health Research and Welfare Society, Trivandrum.

21.3.7 *Activities Relating to Export etc.* The company has bagged an order for 65 million pieces from Russia valued at Rs. 2.86 crores. This order is being executed in the year 1990-91. Further plans include a target of at least 20 per cent of production for exports. In the case of Gloves, buy-back arrangements for 30% of production has also been tied up. The Company is making earnest efforts to secure export orders with the help of State Trading Corporation and other private agencies.

21.3.8 *Foreign Exchange Used and Earned*: The expenditure and earnings in foreign exchange during the current year and the previous year are given below:—

	Current Year	Previous Year
Expenditure	Rs. 11.09 lakh	Rs. 60.01 lakh
Earnings	Rs. 151.81 lakh	Rs.15.65 lakh

21.3.9 *Reservation For SC/ST, Physically Handicapped*: The Company is following reservation policy of the Government of India regarding the SC/ST in direct recruitment as well as promotions. The Company has won the National Award for best employer of physically handicapped.

21.3.10 *Welfare Activities*: The Company has abided by the Wage Settlement with the Trade Unions and had reached a Memorandum of Understanding on 11.10.1989 with the various Trade Unions. The new Wage Settlement has been approved by the Government, and the same has been welcomed by the work-force at Trivandrum. The industrial relations are very cordial and the management regards employees as the most important asset of the organisation.

### 21.4 Family Welfare Training and Research Centre, Bombay

21.4.1 Family Welfare Training and Research Centre, Bombay is a Central Training Institute, responsible for in-service training in Health and Family Welfare of Western Zone of the country which includes States of Gujarat, Madhya Pradesh, Andhra Pradesh, Goa, Daman & Diu and Dadra & Nagar Haveli. Training related to Primary Health Care, Family Welfare and other integrated National Health Programmes is imparted to various categories of health personnel of State and District level i.e. District Health Officers, District Extension and Media Officers and Key Trainers from Health and Family Welfare Training Centres of States of Western Zone of India. During



the year 1990-91 training, education, research activities and clinic services of the Centre were continued in accordance with its objectives.

**21.4.2 Training:** One course of training of fifteen working days in teaching learning methods was conducted for medical faculty of Health and Family Welfare Training Centres.

**21.4.2 (i)** A Workshop on communication of fifteen days duration was also organised for the key trainers.

**21.4.2 (ii)** A one week workshop on Management and Supervision was organised for District Health Officers.

**21.4.2 (iii)** Three Crash Training Programmes of six days duration were conducted for District Extension and Media Officers. Forty three Media Officers were trained in these courses.

**21.4.2 (iv)** One-week course on evaluation of M.C.H. and Family Welfare Programme was also conducted for M.Sc. Nursing Students from S.N.D.T. University.

**21.4.3 Diploma in Health Education Course:** This is a Post-Graduate Diploma course affiliated to the International Institute of Population Sciences (Deemed University), Bombay. Twenty one students have been sponsored for this course; nineteen students are from various States of India i.e., Maharashtra, Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Uttar Pradesh, Andaman and Nicobar Islands. Two students are from Yemen and Myanmar deputed by World Health Organisation. The training is of one year duration and is imparted through class-room sessions, laboratory sessions, field visits, field work in field practice and demonstration area.

**21.4.4 Field Practice and Demonstration Area:** Slums around the Centre are used as field area where the staff and the trainees conduct surveys to identify the

health problems and thereafter organise health programmes to improve the health status of the slum community. Immunization and Health check-up camps were organised in the area. An exhibition was organised on various health problems of the community i.e. Malaria, Tuberculosis, Skin diseases and Diarrhoea. Health Education was given to small groups and individuals and this included education on family planning, nutrition, maternal and child health.

**21.4.5 Follow up visits:** Follow up visits to Health and Family Welfare Training Centres of Bilaspur, Indore, Gwalior, Jabalpur, Ahmedabad, Rajkot, Aliabada, Guntur, Vishakhapatnam, Kurnool and Hyderabad were conducted for supervision and guidance of these centres.

**21.4.6 Education:** The Centre conducts population programmes for government and private organisations. Such courses were conducted for apprentices from Advanced Training Institute, Bombay, Regional Vocational Training Institute, Bombay, Siemens India Limited, Ninth and Tenth Standard girls from Vanita Vishram School, Khetwadi, Bombay.

**21.4.6(i)** Faculty members have written eight fortnight papers on topics related to health and family welfare and two books have been reviewed.

**21.4.7 I.E.C. Training Scheme:** This scheme launched in three districts each of four northern Hindi speaking States in 1988 is currently functioning in nine districts. Family Welfare Training and Research Centre, Bombay as a Central Training Institute is responsible for the implementation of the scheme in the State of Madhya Pradesh. The initial training of the District Supervisory cum Training Team (DSTTs) from the additional six districts has been completed with the help of concerned health and family welfare training centre of M.P. Training of P.H.C. training teams and Sub-centre staff has been taken up by the districts with the



help of State HFWTCs. Plastic fliprolls each with 16 health messages of Family Welfare, Health and Nutrition and Hand Books on MCH Care produced by this institute are being supplied to the Subcentres in the additional I.E.C. districts too.

**21.4.8 Prevention of AIDS:** An I.C.M.R. Surveillance Centre in Kamathipura (a red light area in Bombay) has reported a number of HIV positive prostitutes. A Social Worker Instructor and a Public Health Nurse of this Centre visit this area for health education and counselling of HIV positive prostitutes. The centre also distributes condoms to the prostitutes of this area for prevention and control of HIV infection.

**21.4.8 (i)** Health Education activities have also been started with a second high risk group i.e. mothers (prostitutes) of children from a creche run by a voluntary organisation "Prerna" at Kamathipura.

**21.4.8 (ii)** A two day's teachers training programme was conducted to enable them for imparting population and sex education with emphasis on HIV/AIDS preventive education in their schools.

**21.4.8 (iii)** A study to find out the number of social work teaching institutes imparting training in counselling for STD, HIV/AIDS was conducted and findings presented at WHO workshop on "Psychological counselling for prevention and control of HIV/AIDS". Future workshops and training activities have been planned based on result findings.

**21.4.9 Clinic Services:** Family Planning and M.C.H. services were provided through the Centre's Clinics. The majority of patients are from the neighbouring slums which are used as field practice and demonstration areas.

## 21.5 International Institute for Population Sciences, Bombay

**21.5.1 Training:** The International Institute for Population Sciences, Bombay is a 'Deemed University', functioning under the administrative control of the Ministry of Health and Family Welfare, for imparting training, conducting research and providing consultancy services in the field of Population Studies. The Institute conducts 4 long-term training courses:—

- (1) A one-year Certificate Course in Population Studies;
- (2) Master of Population Studies of one year duration;
- (3) M.Phil. in Population Studies, the minimum period of completion of which is 12 months; and
- (4) Ph.D. Programme in Population Studies leading to Ph.D. degree of this Institute, as well as the University of Bombay.

**21.5.1 (i)** The Institute also conducts several Short-term Training Courses in Demography. In addition, under the auspices of the Institute, the Family Welfare Training and Research Centre, Bombay organizes a one-year Diploma Course in Health Education. During the academic year 1990-91 there are 17 students for the Certificate Course (of which 15 are from countries of ESCAP region outside India under UNFPA/UNDTCD fellowship programmes), 19 for M.P.S. course, 13 for M.Phil programme (of which one is sponsored by the Bangladesh Institute of Development Studies and 2 by the UNDTCD) and 35 have been registered for Ph.D. programme. The students admitted for The Certificate Course in Population Studies from the ESCAP region under the UNFPA Fellowship Programme are from Bangladesh, Peoples's Republic of China, Indonesia, Laos, Malaysia, Nepal, Philippines, Thailand and Vietnam and for M.Phil. from Afghanistan and Bangladesh. There are two students registered for Ph.D. degree of the University of Bombay under the guidance



of the faculty members of the Institute.

**21.5.2 Research:** The Institute has completed the following research projects during 1989-90:

- (1) Population Simulation Project, Assessment of the impact of the Family Planning Programme input on contraceptive use in India—A study based on data collected from Primary Health Centres in four States.
- (2) Role of Incentives in Decision Making Process—A study of sterilization acceptors and non-acceptors in Madhya Pradesh.
- (3) A Cost Benefit Model for Family Planning Programme in India—A part of the population simulation project.
- (4) Study of the unemployed and Under-employed in India.
- (5) Evaluation of Family Planning Programme in India through different approaches.
- (6) Final Evaluation Report on Project on Family Welfare Education for Organised Sector Workers through State Labour Welfare Centres sponsored by ILO/UNFPA and implemented by Maharashtra Labour Welfare Board.
- (7) Evaluation of National Population Education Programme (Formal School System) in India.

**21.5.2 (i)** The following are the 21 on-going research projects initiated during 1989-90 or earlier:

- (1) Mothers Health and Health of Child.
- (2) A Study of Marital Dissolution and Re-marriages in India.

- (3) Impact of Adult Education Programme on some Population Related Factors in Maharashtra.
- (4) Population Density Structure and Changes in Bombay, Pune and Nagpur.
- (5) An Assessment of District-wise Fertility and Mortality Levels and their Determinants.
- (6) Levels and Trends in Regional Development in India 1971-81.
- (7) The Changing Values of the Parents and Children—An inter-generational study of those generations.
- (8) Future Estimates of Minimum Needs of India's population with Reference to Shelter and Education.
- (9) Demographic Profile of Students in Higher Education.
- (10) Determinants of Low Age at Marriage in two selected Villages of Eastern and Western Uttar Pradesh.
- (11) Health Financing in the States of Maharashtra.
- (12) Exploratory Study of the Non-acceptors of Family Planning—an anthropological Investigation in the Villages of Uttar Pradesh.
- (13) Determinants of Ages of the Beginning and End of the Child Bearing.
- (14) A Study of the Patterns and Propensity of the Breast Feeding in Some States of India using Multivariate Life Table Approach.
- (15) Study of Internal Migration in India
- (16) Measurement of Demand for Family Planning in India



(17) Socio-Demographic Profile of Low Income Migrants in Thane.

(18) An Investigation into the Mortality Situation from two Enumerations Subject to Response Biases in Age Reporting for Some Selected Asians and Latin American Countries.

(19) Causes of High Mortality in Madhya Pradesh with Special Reference to Slow Decline.

(20) Study of Use Effectiveness of Condoms and Oral Pills.

(21) Demographic Impact of Development Inputs in Rural Areas of India with Special Reference to Women.

21.5.2 (ii) The new research projects undertaken during the year 1990-91 are as follows:

(1) Differential Child mortality in India.

(2) Migration and Family in Greater Bombay.

(3) Estimation of Adult Mortality for Indian States, 1971-81 from Two Census Enumerations.

(4) Estimation of Age-Specific Fecundability and Secondary Sterility from ASFR Data for India and its Major States.

(5) Book on "Student Research Abstracts in Population Studies", Vol. II.

(6) A methodological Study of Linkages Between Development and Demographic Status in Rural India.

(7) Development and Labour force Participation: An Analysis of Child and Female Labour Force in Africa, Asia and Latin America.

(8) Morphology of Urban Slums.

(9) Age-Patterns of Mortality among Pensioners of Different Service Groups in Maharashtra.

(10) Changes in Occupational Pattern in India—a District Level Analysis.

(11) Internal Labour Migration Urbanization and Development in India, 1971—81.

(12) Applications of the Demographic Field Theory to Developing Countries—A Country Level Analysis.

(13) Role of Commercial Banks in Employment Generation and Rural Development.

21.5.3 *Consultancy Services*: During the year the Institute has provided consultancy services to various other institutions in India and international agencies in the field of population.

21.5.4 *Publications*: A quarterly *Newsletter*, which gives details of the training, research and other activities of the Institute, was brought out by the Institute. The Institute also brought out a biennial publication entitled "*Dynamics of Population and Family Welfare*" and a "*Population Abstract*". The faculty and other academic staff of the Institute prepared a number of research papers and Project Reports during the academic year 1988-89.

21.5.5. *Library*: The Institute's library is considered to be one of the best libraries in Population and related topics in this region. During the year 1989-90, the library added 2680 volumes to its stock, bringing the total number of volumes to 51,425. The library receives 250 journals regularly out of which 150 journals are by way of subscription. In addition, the Library has a total number of 6,463 bound periodicals and 11,744 reprints.



## 21.6 Central Drug Research Institute, Lucknow

21.6.1 The Institute is the premier organisation conducting antifertility and related drug research. Some of its recent endeavours in this area have borne fruit. Progress of work in this area during the year 1990-91 is detailed in the ensuing paragraphs.

21.6.2 *Product Development*: (i) Centchroman, an oral contraceptive; (ii) Extended Phase III Clinical Trial

21.6.2 (a) *Weekly Schedule*: 36 women volunteers continuing with the use of centchroman at the 30 mg weekly dose have been covered for a total of 1,623 months and 1,452 menstrual cycles with use duration ranging from 13 to 40 months. 80% of the women have used the drug for more than 20 months. About 96% of the cycles were within the normal duration and only 2.2% were of more than 45 days duration. Compliance was good and none of the cases reported any side effects. No adverse effects of the drug were observed in clinical, haematological, biochemical or ultrasonographic (ovaries and uterus) examinations. There was no method or patient failure pregnancy in this extended study.

21.6.2 (b) *Biweekly schedule*: In the trial with 30 mg biweekly dose for 3 months followed with 30 mg weekly schedule conducted at 7 Medical Colleges in U.P. and 5 Family Welfare Centres at Lucknow, 342 women volunteers have been covered for a total of 2,286 months and 2,055 cycles. There were 4 method failure pregnancies; P.I. 2.1 and of these 3 occurred during the first 3 months. None of the volunteers had any side effects and only 3.56% of the cycles were longer than 45 days. Clinical and laboratory investigations and ultrasonographic examination of ovaries and uterus were found to be normal.

21.6.2 (b) (i) The Drugs Controller (India)

has granted permission for its marketing and also introduction in National Family Welfare Programme.

21.6.2 (c) *Consap, a vaginal contraceptive cream*: Consap cream containing sapindus saponins has been formulated and the phase II trial has been planned to be initiated shortly.

### 21.6.3 Preclinical Development Studies

21.6.3 (i) *Postcoital contraceptive agents*: An anti implantation agent 85/287 and a contragestational compound 85/83 are being evaluated for contraceptive efficacy in monkeys.

21.6.3 (ii) *Spermicides*: Compound 88/533, a potent spermicide was found to be safe in rabbit vaginal irritation assay.

### 21.6.4 Lead Generation Studies

21.6.4 (i) In the lead generation studies, 56 new synthetic compounds of steroidal and non-steroidal type were synthesised and screened for anti implantation activity in rat and hamster and 2 compounds were identified for development; compound 90/92 and 89/417 showed promising anti implantation activity in rat. About 50 extracts/fractions/compounds of 20 terrestrial plants and 40 samples of marine fauna and flora were tested for post-coital antifertility efficacy in rats. One marine sample (Extract 61-B002) has been identified for follow up studies.

21.6.4 (i) (a) For menses regulation activity, 42 non-steroidal compounds, mostly oxazolone derivatives, and 15 plant extracts/fractions were tested for pregnancy interceptive activity during the peri and immediate post-implantation periods in hamster. Four compounds (88/585, 89/163, 544 and 548) were identified for follow up.

21.6.4 (ii) *Development of non-steroidal oral contraceptives for the male*: None of the compounds/plant extracts tested for



male fertility regulation caused arrest of spermatogenesis or affected fertility. 25 synthetic compounds and 17 natural products including marine fauna and flora were tested for spermicidal activity at 1% concentration. Two synthetic compounds have shown promising activity.

#### 21.6.5 *Basic Studies:*

21.6.5 (i) The duration of action of com-

pound 85/287, an anti implantation agent under development was found to be about 4 days. This compound also showed potent antiestrogenic property in monkey.

21.6.5 (ii) Compound 84/35 found to cause selective arrest of spermatogenesis in rat achieves this effect by directly acting on the germ cells and the effect is not mediated via Sertoli cell.

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(Research Programme for 1991 detailed  
on next page)

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## RESEARCH PROGRAMME FOR 1991

Sl. No.	Project	New or Continued	Expected time of completion
1	2	3	4
1.	<i>Clinical Trials:</i>		
1.1	Multicentric clinical trial of Centchroman against advanced breast cancer	Continued	One year
1.2	Phase II clinical trial of Consap	New	Two years
1.3	Synthesis of 10 kg Centchroman for clinical trials	Continued	One year
1.4	Isolation of 5 kg of Sapindus Saponins for clinical trial	New	One year
2.	<i>Development of Postcoital Contraceptives and Menses Regulating Agents</i>	Continued	Long-term
2.1	Synthesis and screening of 50 new compounds for anti implantation and menses inducing properties	New	One year
2.2	Collection, extraction and screening of 50 plants/marine fauna & flora for anti implantation and menses inducing activities	New	One year
2.3	Efficacy in monkey of orally active formulation of compound 85/83	Continued	One year
2.4	Efficacy in monkey and dog of compound 85/287 in the new schedule	Continued	One year
2.5	Endocrine pharmacology of compound 85/287 or 85/83	New	One year
2.6	Subacute toxicity and teratology of 85/287 or 85/83	New	One year
3.	<i>Development of Nonsteroidal Oral Contraceptives for the Male</i>	Continued	Long-term
3.1	Synthesis and screening of five new compounds and/or plant extracts for anti-spermatogenic activity	New	One year



1	2	3	4
4.	<i>Development of Local Contraceptive Agents</i>	Continued	Long-term
4.1	Screening of 50 plant extracts/compounds for spermicidal activity	New	One year
4.2	Contraceptive efficacy and toxicity of a new spermicide 88/533	New	One year
4.3	Gross pharmacology of 88/533	New	One year
4.4	Teratogenic studies with compound 88/533	New	One year
5.	<i>Goal-Oriented Basic Studies:</i>	Continued	Long-term
5.1	Studies on egg transport and implantation	Continued	Two years
5.2	Studies on sperm maturation and epididymal physiology	Continued	Two years



# ANNEXURES







**SUBORDINATE OFFICES OF  
THE MINISTRY OF HEALTH & FAMILY WELFARE**

- |  |   |
|--|---|
| 1. Director,<br>FWTRC, 332-S.V.P. Road,<br>Bombay-400 004.                       | Complex, No. 1, Kamla Nehru Nagar,<br>Ghaziabad-201002.   |
| 2. Director,<br>Homoeopathic Pharmacopoeia,<br>Laboratory, Central Govt. Offices | 3. Director,<br>Pharmacopoeia Laboratory for<br>Indian Medicine,<br>Central Govt. Offices Complex,<br>Kamla Nehru Nagar,<br>Ghaziabad-201002. |



## LIST OF SUBORDINATE OFFICES OF DIRECTORATE GENERAL OF HEALTH SERVICES

### PORT AND AIRPORT HEALTH OFFICES

1. Port Health Officer,  
Port Health Organisation,  
Pattan Swasthya Bhavan,  
7, Mandlik Road, Bombay-400 039.
  2. Port Health Officer,  
Port Health Organisation,  
Marine House, Hastings,  
Calcutta-700 022.
  3. Port Health Officer,  
Port Health Organisation,  
Cochin-682 033.
  4. Port & Airport Health Officer,  
Port & Airport Health Organisation,  
1st Line Beach, Madras-600 001.
  5. Port Health Officer,  
Port Health Organisation,  
Kandla P.O. New Kandla-330 210.
  6. Deputy Port Health Officer,  
Port Health Organisation,  
Marmagoa, Goa-403 803.
  7. Deputy Port Health Officer,  
Port Health Organisation,  
Vishakhapatnam-530 001.
  8. Asstt. Port Health Officer,  
Port Health Organisation,  
Mandapam Camp, P.O.  
Ramnad District (T.N.).
  9. Airport Health Officer,  
Airport Health Organisation,  
NIPT-II Complex, Sahar,  
Bombay-400 009.
  10. Airport Health Officer,  
Airport Health Organisation,  
Dum Dum Airport, Calcutta-700 052.
  11. Airport Health Officer,  
Airport Health Organisation,  
Palam Airport, New Delhi-110 010.
  12. Asstt. Airport Health Officer,  
Airport Health Organisation,  
Tiruchirapally Airport,  
Tiruchirapally-620 007.
  13. Airport & Attari Border Quarantine,  
32, Beauty Avenue,  
Amritsar-143 001.
- ### MEDICAL STORE DEPOTS
14. D.A.D.G. (M.S.)  
Government Medical Store Depot,  
Bombay Central,  
Bombay-400 008.
  15. D.A.D.G. (M.S.),  
Government Medical Store Depot,  
9, Clyde Row, P.O. Hastings,  
Calcutta-700 022.
  16. D.A.D.G. (M.S.),  
Government Medical Store Depot,  
Karnal-132 001 (Haryana).
  17. Dy. Director General (M.S.),  
Government Medical Store Depot,  
11, Naval Hospital Road,  
Pariameet, P. No. 524,  
Madras-600 001.



18. Dy. Asstt. Director General (M.S.),  
Government Medical Store Depot,  
Caysgala Compound,  
Chatribari, P.O. Rehabari,  
Guwahati-781 001.

19. Dy. Assistant Director General (M.S.),  
Government Medical Store Depot,  
Hyderabad-500 038.

#### **CENTRAL DRUGS STANDARD CONTROL ORGANISATION**

20. Central Drugs Standard Control  
Organisation,  
East Zone (G.O. Building),  
2nd Floor, Nizam Palace,  
2234/4, Lower Circular Road,  
Calcutta-700 020.

21. Dy. Drugs Controller (I),  
Central Drugs Standard Control  
Organisation (West Zone),  
C.G.H.S. Dispensary Building,  
1st Floor, Anttop Hill,  
Bombay-400 37.

22. Dy. Drugs Controller (I),  
Central Drugs Standard Control  
Organisation, South Zone,  
4, Aziz Mulk, 7th Street,  
Thousand Light, Madras-600 006.

23. Dy. Drugs Controller (I),  
Central Drugs Standard Control  
Organisation, C.G.O. Building,  
Kamla Nehru Nagar, Hapur Road,  
Ghaziabad-261 002.

24. Technical Officer,  
Central Drugs Standard Control  
Organisation, Customs House,  
Cochin-682 003.

#### **ASSSTT. DRUGS CONTROLLERS (I)**

25. Asstt. Drugs Controller (I),  
New Customs House, Port  
Bombay-400038.

26. Asstt. Drugs Controller (I),  
Customs House, 15/1, Strand Road,  
Calcutta-700 001.

27. Asstt. Drugs Controller (I),  
Room No. 66, IInd Floor,  
Customs House, Madras-600 001.

#### **CENTRAL GOVERNMENT HEALTH SCHEME**

28. Deputy Director (Central Zone),  
(C.G.H.S. Delhi),  
5th Floor, D-Wing, Nirman Bhavan,  
New Delhi-110011.

29. Deputy Director,  
Central Government Health Scheme,  
2nd Floor, United India Building,  
Sir Feroze Shah Mehta Road,  
Fort, Bombay-400 001.

30. Chief Medical Officer, C.G.H.S.,  
38, Bhavani Nagar,  
Nauchandi Grounds,  
Meerut-250 002.

31. Chief Medical Officer,  
Central Government Health Scheme,  
117/617, Pandu Nagar,  
Kanpur (U.P.).

32. Chief Medical Officer, C.G.H.S.,  
Quarter No. 1, Type III,  
Double Storey, C.P.W.D.,  
Central Govt. Colony, Civil Lines,  
Nagpur.

33. Chief Medical Officer,  
Central Government Health Scheme,  
7, Lidde Road, George Town,  
Allahabad (U.P.).

34. Chief Medical Officer,  
Central Government Health Scheme,  
8, Esplanade East, 4th Floor,  
Calcutta-700 069.

35. Chief Medical Officer,  
Central Government Health Scheme,  
25, Thirumalai Road, T. Nagar,  
Madras-600 017.

36. Chief Medical Officer,  
Central Government Health Scheme,  
2, Patliputra Colony, Patna-13  
(Bihar).



37. Chief Medical Officer,  
Central Government Health Scheme,  
Chikkadpalli, Hyderabad.

38. Chief Medical Officer,  
Central Government Health Scheme,  
21/2/2-A, 9th Main Road,  
III Block West (Jayanagar),  
Bangalore-560 011.

39. Chief Medical Officer,  
Central Government Health Scheme,  
Hotel Radhakrishna,  
Station Road, Jaipur-6.

40. Chief Medical Officer,  
Central Government Health Scheme,  
210/5B, 1st Floor,  
New Sadashiv Peth, Pune-31.

41. Chief Medical Officer,  
CGHS, Shalimar, Coop.  
Housing Society, Near Embassy  
Market, Ashram Road,  
Ahmedabad-380009.

42. Chief Medical Officer, C.G.H.S.,  
Kamla Nehru Nagar,  
Ghaziabad (U.P.).

43. Chief Medical Officer,  
Central Government Health Scheme,  
9-A, Rana Pratap Marg,  
Lucknow-1.

#### **OTHER SUB-OFFICES**

44. Dy. Drugs Controller (I),  
Drugs Inspectors Training Scheme,  
C.G.H.S. Dispensary Building,  
1st Floor, Anttop Hill,  
Bombay-400 037.

45. Director,  
Central Drugs Laboratory,  
3, Kyd Street,  
Calcutta-700 016.

46. Director,  
Central Indian Pharmacopoeia  
Laboratory, Sector 23, Raj Nagar,  
Ghaziabad (U.P.).

47. Director,  
Jawaharlal Institute of Post-Graduate  
Medical Education & Research,  
Pondicherry-6.

48. Principal,  
Lady Hardinge Medical College  
and Smt. S.K. Hospital,  
New Delhi.

49. Principal,  
Kalawati Saran Children's Hospital,  
New Delhi.

50. Acting Superintendent,  
Lady Reading Health School,  
Delhi-110 006.

51. Vice-Principal,  
Rajkumari Amrit Kaur College of  
Nursing, Andrews Ganj,  
New Delhi-110 049.

52. Head of Deptt. of Plastic Surgery and  
Acting Medical Superintendent,  
Safdarjang Hospital, New Delhi.

53. The Medical Superintendent,  
Dr. Ram Manohar Lohia Hospital,  
New Delhi-110 001.

54. Director and Professor of Psychiatry,  
Central Institute of Psychiatry,  
Kanke, Ranchi-6 (Bihar).

55. Director,  
All India Institute of Physical  
Medicine and Rehabilitation,  
Haji Ali Park, Clerk Road,  
Mahalaxmi,  
Bombay-400 034.

56. Director,  
Central Food Laboratory,  
3, Kyd Street, Calcutta-700 016.

57. Director,  
Central Research Institute,  
Kasuali-173 205 (H.P.).



58. Director,  
National Institute of Communicable  
Diseases, 22, Sham Nath Marg,  
Delhi-110 054.
59. Director,  
National Malaria Eradication  
Programme, 22, Sham Nath Marg,  
Delhi-110 054.
60. Director,  
Central Leprosy Teaching and  
Research Institute,  
Tirumani, Chingalpattu  
(Tamil Nadu).
61. Medical Superintendent,  
Regional Leprosy Training Institute,  
P.O. Aska,  
Balampore Distt.,  
Ganjam (Orissa).
62. Medical Officer Incharge,  
Regional Leprosy Training &  
Research Institute,  
Rajpur, Post Box No. 112,  
Rajpur-4492001.
63. Acting Director,  
National Tuberculosis Institute,  
No. 8, Belary Road,  
Bangalore-560 003.
64. Director,  
All India Institute of Hygiene  
and Public Health,  
110, Chittaranjan Avenue,  
Calcutta-700 073.
65. Director,  
B.C.G. Vaccine Laboratory,  
Guindy,  
Madras-600 032.
66. Officer-Incharge,  
Rural Health Training Centre,  
Najafgarh,  
New Delhi-110 043.
67. Officer-Incharge,  
Model Vital & Health Statistics Units,  
Modi Lines No. 2,  
Site Building,  
Nagpur-12.
68. Acting Serologist & Chemical  
Examiner to the Government of India,  
3, Kyd Street,  
Calcutta-700 016.
69. Director,  
Food Research & Standardisation  
Laboratory,  
Navyug Market  
Ghaziabad-1.
70. Director,  
Biological Lab. & Animal House,  
IInd Naval Hospital Road,  
Govt. Medical Store Depot,  
Madras-600 003.
71. Regional Director,  
Regional Office for Health and  
Family Welfare,  
48/8, Hindustan Park,  
Calcutta.
72. Regional Director,  
Health and Family Welfare,  
Danara House, Salimpur Ahara  
(Behind Reserve Bank of India),  
Patna-3.
73. Regional Director,  
Health and Family Welfare,  
C-2, B-80, Mahanagar,  
Lucknow.
74. Regional Director,  
Health and Family Welfare,  
2134, Sector 21-C,  
Chandigarh-160 022.
75. Regional Director,  
A-11/256/B, 1, New Airport,  
Begumpet, Hyderabad-500 076.
76. Regional Director,  
Regional Office for Health and  
Family Welfare, Anand Estate,  
Industrial Estate Corner, Bapunagar,  
Ahmedabad-380 007.



77. Regional Director (H&FW),  
Regional Office for Health and  
Family Welfare, 25, Ramanathan  
Street, 'T' Nagar, Madras-600 017.

78. Regional Director (H&FW),  
Regional Office for Health and  
Family Welfare, Geomin Building,  
Neelam Chowk, Srinagar.

79. Regional Director,  
Health and Family Welfare, Ripon  
Hospital Compound, Shimla-171 001.

80. Regional Director (H&FW),  
Regional Office for Health and Family  
Welfare, Plot No. 110, Saheed Nagar,  
Bhubaneswar-751 007.

81. Regional Director,  
Regional Office for H&FW  
84/2, Parvati Darpan Building,  
1st Floor, Sahakar Nagar-411 009.

82. Regional Director (H&FW),  
Ranjith Vanrose Junction,  
Trivandrum-695 002.

83. Regional Director,  
Health and Family Welfare,  
Sangrila Uripok Road,  
Imphal-795 001.

84. Regional Director,  
Regional Office for Health  
and Family Welfare,  
A-23, Janta Colony,  
Jaipur-302 009.

85. Regional Director,  
Health and Family Welfare,  
131/16, Maharana Pratap Nagar,  
Bhopal-462 001.

86. Regional Director, (H&FW),  
No. 101, Sree Sanidhi Railway  
Parallel, Kumar Park West,  
Bangalore-560 020.

87. Regional Director,  
Regional Office for Health &  
Family Welfare, Felli-Velli,  
Lumphohpho, Shillong-793 014.







